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APPLICANT : Jeffrey M. Friedman et al.

SERIAL NO. : 08/485,943

EXAMINER : Railey, J.

FILED : June 7, 1995

ART UNIT : 1636

FOR : MODULATORS OF BODY WEIGHT, CORRESPONDING  
NUCLEIC ACIDS AND PROTEINS, AND DIAGNOSTIC  
AND THERAPEUTIC USES THEREOF

CERTIFICATE OF MAILING UNDER 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the ASSISTANT COMMISSIONER OF PATENTS, WASHINGTON, DC 20231 on January 19, 1999.

Christine E. Dietzel, Reg. No. 37,309  
(Name of Registered Representative)

Christine E. Dietzel 1/19/99  
(Signature and Date)

SECOND SUPPLEMENTARY AMENDMENT

ASSISTANT COMMISSIONER OF PATENTS  
WASHINGTON, D.C. 20231

Dear Sir:

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GROUP 1700

In furtherance to the Supplementary Amendment filed December 22, 1998 and the Amendment filed November 23, 1998, please enter and consider the following supplementary amendments to the Specification. Please also note that a Substitute Specification, embodying the changes recited hereinbelow, is included herewith for the Examiner's convenience.

Please amend the application as follows:

AMENDMENTS

At page 1, line 25, please delete "(Harris *et al.*, 1987)." and substitute --[Harris *et al.*,

Changes  
Entered as  
Substitute Spec  
2/19/99

*Int. J. Obes.*, 11:275-283 (1987)]-- therefor.

At page 2, line 1-2, please delete "(Harris, 1991)." and substitute --[Harris, *Diabetes Care*, 14(3):639-648 (1991)]-- therefor.

At page 2, line 21, please delete "(Stunkard *et al.*, 1990)." and substitute --[Stunkard *et al.*, *N. Engl. J. Med.*, 322:1483-1487 (1990)]-- therefor.

At page 2, line 22, please delete "(Bogardus *et al.*, 1986)." and substitute --[Bogardus *et al.*, *Diabetes*, 35:1-5 (1986)]-- therefor.

At page 2, line 24, please delete "30%" and substitute --30-- therefor.

At page 2, line 25, please delete "(Moll *et al.*, 1991)." and substitute --[Moll *et al.*, *Am. J. Hum. Genet.*, 49:1243-1255 (1991)]-- therefor.

At page 3, line 5, please delete "(Coleman, 1978)." and substitute --[Coleman *et al.*, *Diabetologia*, 14:141-148 (1978)]-- therefor.

At page 3, line 10-11, please delete "(Bray *et al.*, 1989)" and substitute --[Bray *et al.*, *Am. J. Clin. Nutr.*, 50:891-902 (1989)]-- therefor.

At page 3, line 14-15, please delete "(Leiter, 1989)" and substitute --[Leiter, *Endocrinology*, 124:912-922 (1989)]-- therefor.

At page 3, line 26, please delete "(Coleman, 1973)" and substitute --[Coleman, *Diabetologia*, 9:294-298 (1973)]-- therefor.

At page 4, line 4-5, please delete "(Bahary *et al.*, 1990)" and substitute --[Bahary *et al.*, *Proc. Nat. Acad. Sci. USA*, 87:8642-8646 (1990)]-- therefor.

At page 4, line 5, please delete "Friedman *et al.*, 1991b)" and substitute --Friedman *et al.*, *Genomics*, 11:1054-1062 (1991)]-- therefor.

At page 4, line 6, please delete "syntonic" and substitute --syntenic-- therefor.

At page 4, line 11, please delete "(Truett *et al.*, 1991)" and substitute --[Truett *et al.*, *Proc. Natl. Acad. Sci. USA*, 88:7806-7809 (1991)]-- therefor.

At page 5, line 1, please delete "ob" and substitute -OB- therefor.

At page 5, line 6, please delete "ob" and substitute --OB-- therefor.

At page 5, line 8, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 5, line 9, please delete "db/db" and substitute --db/db-- therefor.

At page 5, line 9, please delete "fa/fa" and substitute --fa/fa--therefor.

At page 5, line 11, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 5, line 12, please delete "db/db" and substitute --db/db-- therefor.

At page 5, line 13, please delete "ob" and substitute --OB-- therefor.

At page 5, line 14, please delete "ob" and substitute --OB-- therefor.

At page 5, line 21, please delete "ob" and substitute --OB-- therefor.

At page 5, line 22, please delete "FIGURE 1" and substitute --FIGURE 1A through E-- therefor.

At page 5, line 25, please delete "ob" and substitute --OB-- therefor.

At page 5, line 27, please delete "ob" and substitute --OB-- therefor.

At page 6, line 1, please delete "ob" and substitute --OB-- therefor.

At page 6, line 5, please delete "FIGURE 1" and substitute --FIGURE 1A through E-- therefor.

At page 6, line 5, please delete "FIGURE 2" and substitute --FIGURE 2A and B-- therefor.

At page 6, line 10, please delete "Figure 1" and substitute --Figure 1A through E-- therefor.

At page 6, line 11, please delete "Figure 2" and substitute --Figure 2A and B-- therefor.

At page 6, line 15, please delete "single stranded" and substitute --single-stranded-- therefor.

At page 6, line 15, please delete "double stranded" and substitute --double-stranded-- therefor.

At page 6, line 19, please delete "Figure 1" and substitute --Figure 1A through E-- therefor.

At page 6, line 19, please delete "Figure 2" and substitute --Figure 2A and B-- therefor.

At page 6, line 20, please delete "Figure 20A (SEQ ID NO:22);" and substitute --

Figure 20A through C (SEQ ID NOS:22 and 24);-- therefor.

At page 6, line 25, please delete "Figure 1" and substitute --Figure 1A through E-- therefor.

At page 6, line 25, please delete "Figure 2" and substitute --Figure 2A and B-- therefor.

At page 6, line 25-26, please delete "Figure 20A (SEQ ID NO:22);" and substitute --Figure 20A through C (SEQ ID NOS: 22 and 24);-- therefor.

At page 7, line 4, please delete "ob" and substitute --OB-- therefor.

At page 7, line 6, please delete "ob" and substitute --OB-- therefor.

At page 7, line 13, please delete "ob" and substitute --OB-- therefor.

At page 7, line 13, please delete "full length" and substitute --full-length-- therefor.

At page 7, line 15, please delete "ob" and substitute --OB-- therefor.

At page 7, line 17, please delete "ob" and substitute --OB-- therefor.

At page 7, line 17, please delete "regio-" and substitute --region--- therefor.

At page 7, line 19, please delete "ob" and substitute --OB-- therefor.

At page 8, line 3, please delete "having nucleotide" and substitute --having a nucleotide-- therefor.

At page 8, line 3, please delete "Figure 1" and substitute --Figure 1A through E-- therefor.

At page 8, line 4, please delete "Figure 2" and substitute --Figure 2A and B-- therefor.

At page 8, line 11, please delete "in similar fashion" and substitute --in a similar fashion-- therefor.

At page 8, line 13, please delete "Figures 1" and substitute --Figures 1A through E-- therefor.

At page 8, line 20, please delete "ob" and substitute --OB-- therefor.

At page 8, line 23, please delete "ob" and substitute --OB-- therefor.

At page 8, line 25, please delete "ob" and substitute --OB-- therefor.

At page 9, line 16, please delete "and or" and substitute --and/or-- therefor.

At page 9, line 25, please delete "Figures 1 and 2" and substitute --FIGURE 1A through E and FIGURE 2A and B-- therefor.

At page 9, line 26, please delete "cDNA in which" and substitute --cDNA which,-- therefor.

At page 10, line 1, please delete "ob" and substitute --OB-- therefor.

At page 10, line 2, please delete "ob" and substitute --OB-- therefor.

At page 10, line 5, please delete "Figures 1" and substitute --Figures 1A through E-- therefor.

At page 11, line 6, please delete "and or" and substitute --and/or-- therefor.

At page 11, line 10, please delete "and or" and substitute --and/or-- therefor.

At page 11, line 18, please delete "**FIGURE 1**" and substitute --**FIGURE 1A through E**-- therefor:

At page 11, line 19, please delete "ob" and substitute --OB-- therefor.

At page 11, line 21, please delete "3700 kB" and substitute --3.7 kb-- therefor.

At page 11, line 23-24, please delete "sequence was determined subsequently, this non-coding sequence was identified as" and substitute --non-coding sequence was determined subsequently to be-- therefor.

At page 12, line 6, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 12, line 7, please delete "**FIGURE 2**" and substitute --**FIGURE 2A and B**-- therefor.

At page 12, line 8, please delete "ob" and substitute --OB-- therefor.

At page 12, line 11, please delete "ob" and substitute --OB-- therefor.

At page 12, line 11, please delete "FIGURE 2" and substitute --FIGURE 2A and B-- therefor.

At page 12, line 17, please delete "ob" and substitute --OB-- therefor.

At page 12, line 20, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 12, line 20, please delete "84" and substitute --83-- therefore.

At page 12, line 22, please delete "overage".

At page 12, line 25, please delete "ob" and substitute --*OB*-- therefor.

At page 13, line 4, please delete "ob" and substitute --*OB*-- therefor.

At page 13, line 9, please delete "ob" and substitute --*OB*-- therefor.

At page 13, line 9, please delete "**FIGURE 7.**" and substitute --**FIGURE 7**-- therefor.

At page 13, line 12, please delete "ob" and substitute --*OB*-- therefor.

At page 13, line 13, please delete "ob" and substitute --*OB*-- therefor.

At page 13, line 22, please delete "ob" and substitute --*OB*-- therefor.

At page 14, line 2, please delete "ob" and substitute --*OB*-- therefor.

At page 14, line 6, please delete "ob" and substitute --*OB*-- therefor.

At page 14, line 8, please delete "ob" and substitute --*OB*-- therefor.

At page 14, line 11, please delete "ob" and substitute --*OB*-- therefor.

At page 14, line 13, please delete "**FIGURE 11.**" and substitute --**FIGURE 11**-- therefor.

At page 14, line 16, please delete "first strand cDNA" and substitute --first strand cDNA synthesis-- therefor.

At page 14, line 17, please delete "denaturation x 1'; 55° hybridization x 1'; and 72 extensions" and substitute --denaturation for 1'; 55° hybridization for 1'; and 72°C extensions-- therefor.

At page 14, line 25, please delete "RT PCR" and substitute --RT-PCR-- therefor.

At page 14, line 25, please delete "**FIGURE 12.**" and substitute --**FIGURE 12**-- therefor.

At page 14, line 28, please delete "single stranded" and substitute --single-stranded-- therefor.

At page 15, line 7, please delete "fate" and substitute --fat-- therefor.

At page 15, line 7, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 15, line 9, please delete "ob<sup>2J</sup>/ob<sup>2J</sup>" and substitute --*ob<sup>2J</sup>/ob<sup>2J</sup>*-- therefor.

At page 15, line 18, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 15, line 20, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 15, line 23, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 15, line 25, please delete "ABI" and substitute --Applied Biosystems, Inc.-- therefor.

At page 15, line 27, please delete "FIGURE 15. (A) Genomic southern" and substitute --FIGURE 15 (A) Southern-- therefor.

At page 16, line 5, please delete "Dacob<sup>2J</sup>/ob<sup>2J</sup>" and substitute --<sup>Dac</sup>*ob<sup>2J</sup>/ob<sup>2J</sup>*-- therefor.

At page 16, line 9, please delete "Dacob<sup>2J</sup>/ob<sup>2J</sup>" and substitute --<sup>Dac</sup>*ob<sup>2J</sup>/ob<sup>2J</sup>*-- therefor.

At page 16, line 11, please delete "<sup>Dac</sup>ob<sup>2J</sup>/ob<sup>2J</sup>" and substitute --<sup>Dac</sup>*ob<sup>2J</sup>/ob<sup>2J</sup>*-- therefor.

At page 16, line 13, please delete "Bgl" and substitute --*Bgl*II-- therefor.

At page 16, line 15, please delete "<sup>Dac</sup>ob<sup>2J</sup>/ob<sup>2J</sup>" and substitute --<sup>Dac</sup>*ob<sup>2J</sup>/ob<sup>2J</sup>*-- therefor.

At page 16, line 16, please delete "EcoRI" and substitute --*Eco*RI-- therefor.

At page 16, line 17, please delete "*ob*" and substitute --*OB*-- therefor.

At page 16, line 23, please delete "Kodak X-OMAT" and substitute --Kodak (Rochester, N.Y.) X-OMAT-- therefor.

At page 16, line 24, please delete "pET-15b (Novagen)." and substitute --pET-15b (Novagen) (SEQ ID NOS.: 11 and 12).-- therefor.

At page 16, line 26, please delete at both occurrences "*ob*" and substitute --*OB*-- therefor.

At page 16, line 27, please delete "Bacteria transformed" and substitute --Bacteria

were transformed-- therefor.

At page 17, line 1, please delete "ob" and substitute --OB-- therefor.

At page 17, line 2, please delete "the inclusion body." and substitute --the inclusion bodies.-- therefor.

At page 17, line 2, please delete "inclusion body was" and substitute --inclusion bodies were-- therefor.

At page 17, line 7, please delete "ob" and substitute --OB-- therefor.

At page 17, line 9, please delete "of *ob* RNA. A human *ob* cDNA" and substitute -of *OB* RNA. A human *OB* cDNA-- therefor.

At page 17, line 9, please delete "**FIGURE 19.**" and substitute --**FIGURE 19**-- therefor.

At page 17, line 11, please delete "sp6 polymerase" and substitute --Sp6 polymerase-- therefor.

At page 17, line 23, please delete "from" and substitute --form-- therefor.

At page 17, line 25, please delete "**FIGURE 20.** (A) The sequence of the human *ob* gene (SEQ ID NO:22)." and substitute --**FIGURE 20** (A through E) The sequence of the human *OB* gene (SEQ ID NOS:22 and 24).-- therefor.

At page 17, line 25, please delete "(B)" and substitute --(F)-- therefor.

At page 17, line 26, please delete "*ob*" and substitute --*OB*-- therefor.

At page 17, line 26, please delete "(C)" and substitute --(G)-- therefor.

At page 17, line 27, please delete "(B) and (C)" and substitute --(F) and (G)-- therefor.

At page 17, line 27, please delete "*ob*" and substitute --*OB*-- therefor.

At page 18, line 2, please delete "*ob*" and substitute --*OB*-- therefor.

At page 18, line 2, please delete "pichia" and substitute --*Pichia*-- therefor.

At page 18, line 3, please delete "*ob*" and substitute --*OB*-- therefor.

At page 18, line 5, please delete "(SEQ ID NO:23)" and substitute --(SEQ ID NO:26)-- therefor.



At page 18, line 6-7, please delete "(SEQ ID NO:24)." and substitute --(SEQ ID NO:27).-- therefor.

At page 18, line 7, please delete "ob under" and substitute --OB-- therefor.

At page 18, line 9, delete "ob" and substitute --OB--therefor.

At page 18, line 10, please delete "(SEQ ID NO:25)." and substitute --(SEQ ID NO:28).-- therefor.

At page 18, line 11, please delete "**FIGURE 22.**" and substitute --**FIGURE 22**-- therefor.

At page 18, line 11, please delete "pichia" and substitute --*Pichia*-- therefor.

At page 18, line 12, please delete "*ob*" and substitute --*OB*-- therefor.

At page 18, line 12, please delete "His tag" and substitute --His-tag-- therefor.

At page 18, line 13, please delete "sequence." and substitute --sequence (SEQ ID NO:33).--

At page 18, line 14, please delete "ob" and substitute --OB-- therefor.

At page 18, line 14, please delete "His tag" and substitute --His-tag-- therefor.

At page 18, line 16, please delete "cleavage site, and which would yield ob" and substitute --cleavage site, which would yield OB-- therefor.

At page 18, line 18, please delete "*ob*" and substitute --OB-- therefor.

At page 18, line 18, please delete "**FIGURE 23.**" and substitute --**FIGURE 23**-- therefor.

At page 18, line 20, please delete "pichia" and substitute --*Pichia*-- therefor.

At page 18, line 23, please delete "ob" and substitute --OB-- therefor.

At page 18, line 27, please delete "shows the ob" and substitute --shows that the OB-- therefor.

At page 19, line 1, please delete "anti-ob" and substitute --anti-OB-- therefor.

At page 19, line 4, please delete "ob" and substitute --OB-- therefor.

At page 19, line 5, please delete "ob" and substitute --OB-- therefor.

At page 19, line 6, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 19, line 7, please delete "db/db" and substitute --*db/db*-- therefor.

At page 19, line 8, please delete "ob" and substitute --OB-- therefor.

At page 19, line 9, please delete "ob" and substitute --OB-- therefor.

At page 19, line 11, please delete "db" and substitute --*db*-- therefor.

At page 19, line 13, please delete "ob" and substitute --OB-- therefor.

At page 19, line 14, please delete "ob" and substitute --OB-- therefor.

At page 19, line 17, please delete "wild type mice" and substitute --wild-type mice-- therefor.

At page 19, line 20, please delete "wild type mice" and substitute --wild-type mice-- therefor.

At page 19, line 22, please delete "ob" and substitute --OB-- therefor.

At page 19, line 23, please delete "wild type mice" and substitute --wild-type mice-- therefor.

At page 19, line 26, please delete "**Figure**" and substitute --**FIGURE**-- therefor.

At page 19, line 26, please delete "ob" and substitute --OB-- therefor.

At page 20, line 1, please delete "ob" and substitute --OB-- therefor.

At page 20, line 2, please delete "ob" and substitute --OB-- therefor.

At page 20, line 4, please delete "anti-ob" and substitute --anti-OB-- therefor.

At page 20, line 5, please delete "concentration of ob standard" and substitute --known concentrations of OB-- therefor.

At page 20, line 7, please delete "human ob" and substitute --human OB-- therefor.

At page 20, line 7, please delete "the ob" and substitute --the OB-- therefor.

At page 20, line 9, please delete "ob" and substitute --OB-- therefor.

At page 20, line 12, please delete "**Figure**" and substitute --**FIGURE**-- therefor.

At page 20, line 12, please delete "ob" and substitute --OB-- therefor.

At page 20, line 14, please delete "western" and substitute --Western-- therefor.

At page 20, line 20, please delete "ob" and substitute --OB-- therefor.

At page 21, line 9, please delete "**Figure**" and substitute --**FIGURE**-- therefor.

At page 21, line 10, please delete "ob" and substitute --OB-- therefor.

At page 21, line 11, please delete "PET 15b" and substitute --pET 15b-- therefor.

At page 21, line 11, please delete "PET vector" and substitute --pET vector-- therefor.

At page 21, line 20, please delete "**Figure**" and substitute --**FIGURE**-- therefor.

At page 21, line 20, please delete "ob" and substitute --OB-- therefor.

At page 21, line 22, please delete "ob" and substitute --OB-- therefor.

At page 21, line 24, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 21, line 25, please delete "db/db" and substitute --*db/db*-- therefor.

At page 21, line 28, please delete "wild type" and substitute --wild-type-- therefor.

At page 21, line 29, please delete "*ob* mice" and substitute --*ob* mice-- therefor.

At page 22, line 6, please delete "mice at two" and substitute --mice at two-- therefor.

At page 22, line 9, please delete "**Figure**" and substitute --**FIGURE**-- therefor.

At page 22, line 10, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 22, line 12, please delete "food restricted" and substitute --food-restricted-- therefor.

At page 22, line 14, please delete "weight reducing" and substitute --weight-reducing-- therefor.

At page 22, line 14, please delete "ob" and substitute --OB-- therefor.

At page 22, line 16, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 22, line 17, please delete "65 grams which" and substitute --65 grams, which-- therefor.

At page 22, line 18, please delete "ob" and substitute --OB-- therefor.

At page 22, line 20, please delete "ob" and substitute --*ob*-- therefor.

At page 22, line 21, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 22, line 25, please delete "**Figure**" and substitute --**FIGURE**-- therefor.

At page 22, line 25, please delete "ob" and substitute --*ob*-- therefor.

At page 22, line 26, please delete "Antisense" and substitute --antisense-- therefor.

At page 22, line 26, please delete "t7" and substitute --T7-- therefor.

At page 22, line 28, please delete "labelled" and substitute --labeled-- therefor.

At page 22, line 29, please delete "(labelled db)." and substitute --(labeled *db*).-- therefor.

At page 22, line 29, please delete "wild type" and substitute --wild-type-- therefor.

At page 22, line 29, please delete "db/db" and substitute --*db/db*-- therefor.

At page 23, line 2, please delete "membrane X 65." and substitute --membrane.-- therefor.

At page 23, line 3, please delete "wild type" and substitute --wild-type-- therefor.

At page 23, line 5, please delete "db/db" and substitute --*db/db*-- therefor.

At page 23, line 6, please delete "**Figure**" and substitute --**FIGURE**-- therefor.

At page 23, line 6, please delete "*ob*" and substitute --OB-- therefor.

At page 23, line 8, please delete "Northern blots" and substitute --blotted-- therefor.

At page 23, line 8, please delete "*ob*" and substitute --OB-- therefor.

At page 23, line 9, please delete "*ob*" and substitute --OB-- therefor.

At page 23, line 11, please delete "*ob*" and substitute --*OB*-- therefor.

At page 23, line 14, please delete "*ob*" and substitute --*OB*-- therefor.

At page 23, line 15, please delete "**Figure**" and substitute --**FIGURE**-- therefor.

At page 23, line 15, please delete "*ob*" and substitute --*OB*-- therefor.

At page 23, line 16, please delete "*ob*" and substitute --*OB*-- therefor.

At page 23, line 17, please delete "RNA levels although" and substitute --RNA levels, although-- therefor.

At page 23, line 17, please delete "in the levels" and substitute --in the level-- therefor.

At page 23, line 19, please delete "*ob*" and substitute --*OB*-- therefor.

At page 23, line 20, please delete "*ob*" and substitute --*OB*-- therefor.

At page 23, line 23, please delete "**Figure**" and substitute --**FIGURE**-- therefor.

At page 23, line 23, please delete "*ob*" and substitute --*OB*-- therefor.

At page 23, line 23, please delete "*db/db*" and substitute --*db/db*-- therefor.

At page 23, line 24, please delete "Gold Thioglucose" and substitute --gold thioglucose-- therefor.

At page 23, line 25, please delete "*db/db*" and substitute --*db/db*-- therefor.

At page 23, line 25, please delete "on a Northern blot." and substitute --and Northern blotted.-- therefor.

At page 23, line 25, please delete "*db/db*" and substitute --*db/db*-- therefor.

At page 24, line 1, please delete "*ob*" and substitute --*OB*-- therefor.

At page 24 line 1, please delete ""*db/db*" and substitute --*db/db*--therefor.

At page 24, line 2, please delete "*ob*" and substitute --*OB*-- therefor.

At page 24, line 5, please delete "**Figure**" and substitute --**FIGURE**-- therefor.

At page 24, line 5, please delete "northern" and substitute --Northern-- therefor.

At page 24, line 8, please delete "*ob*" and substitute --OB-- therefor.

At page 24, line 11, please delete "*ob*" and substitute --OB-- therefor.

At page 24, line 14, please delete "(e.g.," and substitute --(e.g.,-- therefor.

At page 24, line 16, please delete "**Figure**" and substitute --**FIGURE**-- therefor.

At page 24, line 16, please delete "*ob*" and substitute --OB-- therefor.

At page 24, line 18, please delete "*ob*" and substitute --OB-- therefor.

At page 24, line 19-20, please delete "C.L. Magness and P. Green, unpublished data).".

At page 24, line 19, please delete "(Green and Green, 1991a;" and substitute --[Green *et al.*, *PCR Methods Applic.*, 1:77-90 (1991)].-- therefor.

At page 24, line 22, please delete "PAX4" and substitute --*Pax4*-- therefor.

At page 24, line 22, please delete "*ob*" and substitute --OB-- therefor.

At page 25, line 5-6, please delete "(Green et al., 1995, *Genomics* 25:170-83)" and substitute --[Green *et al.*, *Genomics*, 25:170-183 (1995)]-- therefor.

At page 25, line 18, please delete "*ob*" and substitute --OB-- therefor.

At page 25, line 22, please delete "*ob*" and substitute --OB-- therefor.

At page 25, line 23, please delete "pdypeptide" and substitute --polypeptide-- therefor.

At page 25, line 24, please delete "indicates" and substitute --indicate-- therefor.

At page 25, line 27, please delete "*ob*" and substitute --OB-- therefor.

At page 25, line 29, please delete "*ob*" and substitute --OB-- therefor.

At page 25, line 29, please delete "(wildtype)" and substitute --(wild-type)-- therefor.

At page 26, line 1, please delete "*ob*" and substitute --OB-- therefor.

At page 26, line 3, please delete "*ob/ob*" and substitute --*ob/ob*-- therefor.

At page 26, line 4, please delete "db/db" and substitute --*db/db*-- therefor.

At page 26, line 4, please delete "fa/fa" and substitute --*fa/fa*-- therefor.

At page 26, line 5, please delete "reduces" and substitute --reduce-- therefor.

At page 26, line 6, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 26, line 6, please delete "effects" and substitute --affects-- therefor.

At page 26, line 7, please delete "db/db" and substitute --*db/db*-- therefor.

At page 26, line 8, please delete "ob" and substitute --OB-- therefor.

At page 26, line 9, please delete "ob" and substitute --OB-- therefor.

At page 26, line 13, please delete "*ob*" and substitute --OB-- therefor.

At page 26, line 16, please delete "FIGURE 1" and substitute --FIGURE 1A through E-- therefor.

At page 26, line 16, please delete "FIGURE 2" and substitute --FIGURE 2A and B-- therefor.

At page 26, line 19, please delete "*ob*" and substitute --OB-- therefor.

At page 26, line 23, please delete "FIGURE 1" and substitute --FIGURE 1A through E-- therefor.

At page 26, line 24, please delete "as well as conserved" and substitute --as well as to conserved-- therefor.

At page 27, line 5, please delete "transmucal" and substitute --transmucosal-- therefor.

At page 27, line 19, please delete "*ob*" and substitute --OB-- therefor.

At page 27, line 30, please delete "*ob*" and substitute --OB-- therefor.

At page 28, line 1, please delete "that a" and substitute --that comprise a-- therefor.

At page 28, line 3, please delete "ob" and substitute --OB-- therefor.

At page 28, line 7, please delete "wild type" and substitute --wild-type-- therefor.

At page 28, line 8, please delete "*ob*" and substitute --OB-- therefor.

At page 28, line 9, please delete "(Jaenisch, *Science* **240**, 1468-1474, 1988)" and substitute --[Jaenisch, *Science*, **240**:1468-1474 (1988)]-- therefor.

At page 28, line 14, please delete "*ob*" and substitute --*OB*-- therefor.

At page 28, line 26, please delete "*ob*" and substitute --*OB*-- therefor.

At page 28, line 28, please delete "wild type" and substitute --wild-type-- therefor.

At page 29, line 2, please delete "Tk" and substitute --TK-- therefor.

At page 29, line 3, please delete "Kruppel" and substitute --*Kruppel*-- therefor.

At page 29, line 3, please delete "shiverer" and substitute --*Shiverer*-- therefor.

At page 29, line 4, please delete "(Izant and Weintraub, *Cell* **36**, 1007-1015, 1984;" and substitute --[Izant *et al.*, *Cell*, **36**:1007-1015 (1984);-- therefor.

At page 29, line 4-5, please delete "Green *et al.*, *Annu. Rev. Biochem.* **55**, 569-597, 1986;" and substitute --Green *et al.*, *Annu. Rev. Biochem.*, **55**:569-597 (1986);-- therefor.

At page 29, line 5-6, please delete "Katsuki *et al.*, *Science* **241**, 593-595, 1988)" and substitute --Katsuki *et al.*, *Science*, **241**:593-595 (1988)]-- therefor.

At page 29, line 10, please delete "SV40 poly A" and substitute --SV40 polyA-- therefor.

At page 29, line 13, please delete "*ob*" and substitute --*OB*-- therefor.

At page 29, line 14, please delete "*ob*" and substitute --*OB*-- therefor.

At page 30, line 8, please delete "Figure 1" and substitute --Figure 1A through E-- therefor.

At page 30, line 9, please delete "Figure 2" and substitute --Figure 2A and B-- therefor.

At page 30, line 10, please delete "Figure 1" and substitute --Figure 1A through E-- therefor.

At page 31, line 1, please delete "The Ob Polypeptides" and substitute --The OB Polypeptides-- therefor.

At page 31, line 2, please delete "*ob*" and substitute --*OB*-- therefor.

At page 31, line 5, please delete "*ob*" and substitute --*OB*-- therefor.



At page 31, line 7, please delete "ob" and substitute --OB-- therefor.

At page 31, line 9, please delete "ob" and substitute --OB-- therefor.

At page 31, line 11, please delete ""biologically active"," and substitute --  
"biologically active,"-- therefor.

At page 31, line 15, please delete "ob" and substitute --OB-- therefor.

At page 31, line 15, please delete "Ob" and substitute --OB-- therefor.

At page 31, line 19, please delete "ob" and substitute --OB-- therefor.

At page 31, line 21, please delete "ob" and substitute --OB-- therefor.

At page 31, line 22, please delete "biological fluid from, such" and substitute --  
biological fluid, such-- therefor.

At page 31, line 25, please delete "ob" and substitute --OB-- therefor.

At page 31, line 27, please delete "ob" and substitute --OB-- therefor.

At page 31, line 29, please delete "ob" and substitute --OB-- therefor.

At page 32, line 5, please delete "ob" and substitute --OB-- therefor.

At page 32, line 6, please delete "Ob" and substitute --OB-- therefor.

At page 32, line 7, please delete "ob" and substitute --OB-- therefor.

At page 32, line 8, please delete "ob" and substitute --OB-- therefor.

At page 32, line 9, please delete "ob" and substitute --OB-- therefor.

At page 32, line 10, please delete the first instance of "ob" and substitute --OB--  
therefor.

At page 32, line 10, please delete the second instance of "ob" and substitute --OB--  
therefor.

At page 32, line 11, please delete the first instance of "ob" and substitute --OB--  
therefor.

At page 32, line 11, please delete the second instance of "ob" and substitute --OB--  
therefor.

At page 32, line 12, please delete the first instance of "ob" and substitute --OB-- therefor.

At page 32, line 12, please delete the second instance of "ob" and substitute --OB-- therefor.

At page 32, line 14, please delete "ob" and substitute --OB-- therefor.

At page 32, line 15, please delete "ob" and substitute --OB-- therefor.

At page 32, line 16, please delete the first instance of "ob" and substitute --OB-- therefor.

At page 32, line 16, please delete the second instance of "ob" and substitute --OB-- therefor.

At page 32, line 17, please delete "ob" and substitute --OB-- therefor.

At page 32, line 18, please delete the first instance of "ob" and substitute --OB-- therefor.

At page 32, line 18, please delete the second instance of "ob" and substitute --OB-- therefor.

At page 32, line 20, please delete "ob" and substitute --OB-- therefor.

At page 32, line 21, please delete the first instance of "ob" and substitute --OB-- therefor.

At page 32, line 21, please delete the second instance of "ob" and substitute --OB-- therefor.

At page 32, line 23, please delete "ob" and substitute --OB-- therefor.

At page 32, line 26, please delete "ob" and substitute --OB-- therefor.

At page 33, lines 2-7, please delete "Referring still to Figure 4, other amino acids in the human ob peptide that appear to be capable of substitution are histidine at position 118, tryptophan at position 121, alanine at position 122, glutamic acid at position 126, threonine at position 127, leucine at position 128, glycine at position 132, glycine at position 139, tryptophan at position 159, and glycine at position 166." and substitute --Referring still to Figure 4, other amino acids in the human OB peptide that appear to be capable of substitution are lysine at position 56, threonine at position 71, isoleucine at position 85, methionine at position 89, isoleucine at position 95, valine at position 110, histidine at position 118, tryptophan at position 121, alanine at position 122, glutamic acid at position 126, threonine at position 127, leucine at position 128, aspartic acid at position 129,

glycine at position 132, glycine at position 139, methionine at position 157, tryptophan at position 159, leucine at position 163, and glycine at position 166.-- therefor

At page 33, line 11, please delete the first instance of "ob" and substitute --OB-- therefor.

At page 33, line 11, please delete the second instance of "ob" and substitute --OB-- therefor.

At page 33, line 16, please delete "ob" and substitute --OB-- therefor.

At page 33, line 18, please delete "ob" and substitute --OB-- therefor.

At page 33, line 18, please delete "ob-specific" and substitute --OB-specific-- therefor.

At page 33, line 19, please delete "ob peptide" and substitute --OB polypeptide-- therefor.

At page 33, line 20, please delete the first instance of "ob" and substitute --OB-- therefor.

At page 33, line 20, please delete the second instance of "ob" and substitute --OB-- therefor.

At page 33, line 21, please delete "peptide" and substitute --polypeptide-- therefor.

At page 33, line 24, please delete "(the" and substitute --[the-- therefor.

At page 33, line 26, please delete "ob" and substitute --OB-- therefor.

At page 33, line 27-28, please delete "Cohen et al., 1995, "Probing the Solution Structure of the DNA-Binding Protein Mass by a Combination of Proteolysis and Mass Spectrometry,")" and substitute --Cohen *et al.*, *Protein Science*, 4:1088 (1995)].-- therefor.

At page 34, line 1, please delete "spec" and substitute --spec.-- therefor.

At page 34, line 1, please delete "ob" and substitute --OB-- therefor.

At page 34, line 9, please delete "dirivitization" and substitute --derivatization-- therefor.

At page 34, line 12, please delete "derivitized" and substitute --derivatized-- therefor.

At page 34, line 20, please delete "ob" and substitute --OB-- therefor.

At page 34, line 21, please delete "ob peptide" and substitute --OB polypeptide-- therefor.

At page 34, line 24, please delete "ob peptide" and substitute --OB polypeptide-- therefor.

At page 34, line 27, please delete "ob peptide" and substitute --OB polypeptide-- therefor.

At page 35, line 4, please delete "ob peptide" and substitute --OB polypeptide-- therefor.

At page 35, line 6, please delete "ob" and substitute --OB-- therefor.

At page 35, line 8, please delete "ob" and substitute --OB-- therefor.

At page 35, line 13, please delete "ob" and substitute --OB-- therefor.

At page 35, line 15, please delete "ob peptide" and substitute --OB polypeptide-- therefor.

At page 35, line 15, please delete "structure forming" and substitute --structure-forming-- therefor.

At page 35, line 24, please delete "*Ob*" and substitute --OB-- therefor.

At page 35, line 25, please delete the first instance of "*Ob*" and substitute --OB-- therefor.

At page 35, line 25, please delete the second instance of "ob" and substitute --OB-- therefor.

At page 35, line 27-28, please delete "(e.g., Hopp and Woods, 1981, *Proc. Natl. Acad. Sci. U.S.A.* 78:3824)" and substitute --[e.g., Hopp *et al.*, *Proc. Natl. Acad. Sci. USA*, 78:3824 (1981)]-- therefor.

At page 35, line 29, please delete "ob" and substitute --OB-- therefor.

At page 36, line 3, please delete "(e.g., Chou and Fasman, 1974, *Biochemistry* 13:222)" and substitute --[e.g., Chou *et al.*, *Biochem.*, 13:222 (1974)]-- therefor.

At page 36, line 4, please delete "ob" and substitute --OB-- therefor.

At page 36, line 8, please delete "ob" and substitute --OB-- therefor.

At page 36, line 14, please delete "(Marion et al., 1983, Biochem. Biophys. Res. Comm. 113:967-974;" and substitute --[Marion *et al.*, *Biochem. Biophys. Res. Comm.*, 113:967-974 (1983);-- therefor.

At page 36, line 15, please delete "Bar et al., 1985, J. Magn. Reson. 65:355-360;" and substitute --Bar *et al.*, *J. Magn. Reson.*, 65:355-360 (1985);-- therefor.

At page 36, line 15-16, please delete "Kimura et al., 1980, Proc. Natl. Acad. Sci. U.S.A. 77:1681-1685)" and substitute --Kimura *et al.*, *Proc. Natl. Acad. Sci. USA*, 77:1681-1685 (1980)]-- therefor.

At page 36, line 18, please delete "(Engstom, A., 1974, Biochem. Exp. Biol. 11:7-13)" and substitute --[Engstom, *Biochem. Exp. Biol.*, 11:7-13 (1974)]-- therefor.

At page 36, line 19, please delete "ob" and substitute --OB-- therefor.

At page 36, line 20, please delete "ob" and substitute --OB-- therefor.

At page 36, line 21, please delete "cross reactivity" and substitute --cross-reactivity-- therefor.

At page 36, line 25, please delete "*Ob*" and substitute --OB-- therefor.

At page 37, line 2, please delete "ob" and substitute --OB-- therefor.

At page 37, line 4, please delete "anti-ob" and substitute --anti-OB-- therefor.

At page 37, line 5, please delete both occurrences of "ob" and substitute --OB-- therefor.

At page 37, line 6, please delete "Any" and substitute --any-- therefor.

At page 37, line 7, please delete "ob" and substitute --OB-- therefor.

At page 37, line 9, please delete "activates ob" and substitute --active OB-- therefor.

At page 37, line 12, please delete "clue as the" and substitute --clue as to the-- therefor.

At page 37, line 19-20, please delete "(Scott and Smith, 1990, Science 249:386-390;" and substitute --[Scott *et al.*, *Science*, 249:386-390 (1990);-- therefor.

At page 37, line 19-20, please delete "Cwirla, et al., 1990, Proc. Natl. Acad. Sci., 87:6378-6382;" and substitute --Cwirla *et al.*, *Proc. Natl. Acad. Sci. USA*, 87:6378-6382 (1990);-- therefor.

At page 37, line 20-21, please delete "Devlin et al., 1990, Science, 249:404-406)" and substitute --Devlin *et al.*, *Science*, **249**:404-406 (1990)]-- therefor.

At page 37, line 23, please delete "(Geysen et al., 1986, Molecular Immunology 23:709-715;" and substitute --[Geysen *et al.*, *Molecular Immunology*, **23**:709-715 (1986);-- therefor.

At page 37, line 23-24, please delete "Geysen et al. 1987, J. Immunologic Method 102:259-274)" and substitute --Geysen *et al.*, *J. Immunologic Method*, **102**:259-274 (1987)]-- therefor.

At page 37, line 24-25, please delete "(1991, Science 251, 767-773)" and substitute --Fodor *et al.*, *Science*, **251**:767-773 (1991)-- therefor.

At page 37, line 25-26, please delete "(1988, 14th International Congress of Biochemistry, Volume 5, Abstract FR:013;" and substitute --[Furka *et al.* *14th International Congress of Biochemistry*, Volume 5, Abstract FR:013 (1988);-- therefor.

At page 37, line 26-27, please delete "Furka, 1991, Int. J. Peptide Protein Res. 37:487-493)," and substitute --Furka, *Int. J. Peptide Protein Res.*, **37**:487-493 (1991)];-- therefor.

At page 37, line 28, please delete "December 1986) and Rutter et al." and substitute --December 1986); and Rutter *et al.*-- therefor.

At page 38, line 3-5, please delete "(Needels et al., 1993, "Generation and screening of an oligonucleotide encoded synthetic peptide library," Proc. Natl. Acad. Sci. USA 90:10700-4; Lam et al., International Patent Publication No. WO 92/00252, each of which is incorporated herein by reference in its entirety)," and substitute --[Needels *et al.*, *Proc. Natl. Acad. Sci. USA*, **90**:10700-10704 (1993); Lam *et al.*, International Patent Publication No. WO 92/00252, each of which is incorporated herein by reference in its entirety],-- therefor.

At page 38, line 7, please delete "ob" and substitute --OB-- therefor.

At page 38, line 8, please delete "cell" and substitute --cells-- therefor.

At page 38, line 9, please delete "ob" and substitute --OB-- therefor.

At page 38, line 9, please delete "(Lam et al., *supra*)".

At page 38, line 11, please delete "ob" and substitute --OB-- therefor.

At page 38, line 12, please delete "ob" and substitute --OB-- therefor.

At page 38, line 14, please delete "ob" and substitute --OB-- therefor.

At page 38, line 17, please delete "ob receptor that" and substitute --OB receptor, that-- therefor.

At page 38, line 20, please delete "Ob" and substitute --OB-- therefor.

At page 38, line 22, please delete ""polypeptide"," and substitute --"polypeptide,"-- therefor.

At page 39, line 4-5, please delete "Abuchowski et al., in Enzymes as Drugs. (J.S. Holcerberg and J. Roberts, eds. pp. 367-383 (1981))" and substitute --Abuchowski *et al.*, "Soluble Polymer-Enzyme Adducts", in *Enzymes as Drugs*, pp. 367-383, Holcenberg and Roberts, eds., Wiley-Interscience, New York, NY, (1981)-- therefor.

At page 39, line 6-8, please delete "Francis, *Focus on Growth Factors* 3: 4-10 (May 1992) (published by Mediscript, Mountview Court, Friern Barnet Lane, London N20, OLD, UK)" and substitute --Francis, *Focus on Growth Factors*, 3:4-10 (1992)-- therefor.

At page 39, line 27, please delete "co- polymers" and substitute --co-polymers-- therefor.

At page 39, line 28, please delete "may advantages" and substitute --may provide advantages-- therefor.

At page 40, line 14, please delete "(e.g.," and substitute --(e.g.,-- therefor.

At page 40, line 26, please delete "art. E.g.," and substitute --art, *e.g.*,-- therefor.

At page 40, line 27, please delete "G-CSF), see also " and substitute --G-CSF). *See also* -- therefor.

At page 40, line 27, please delete "Malik et al., *Exp. Hematol.* 20: 1028-1035 (1992)" and substitute --Malik *et al.*, *Exp. Hematol.*, 20:1028-1035 (1992)-- therefor.

At page 40, line 28, please delete "GM-CSF" and substitute --G-CSF-- therefor.

At page 41, line 2, please delete "as, a" and substitute --as a-- therefor.

At page 41, line 4, please delete "N- terminal" and substitute --N-terminal-- therefor.

At page 41, line 6, please delete "residues glutamic acid" and substitute --residues, glutamic acid-- therefor.

At page 41, line 6, please delete "Sulphydrl" and substitute --Sulphydryl-- therefor.

At page 41, line 11, please delete "*chemically modified proteins.*" and substitute --*Chemically Modified Proteins*-- therefor.

At page 41, line 18, please delete "(i.e.," and substitute --(i.e.,-- therefor.

At page 41, line 21, please delete "chemically" and substitute --chemical-- therefor.

At page 41, line 23, please delete "N-terminal" and substitute --N-terminus-- therefor.

At page 41, line 27, please delete "at pH" and substitute --at a pH-- therefor.

At page 42, line 6, please delete "propionaldehyde" and substitute --propionaldehyde-- therefor.

At page 42, line 7, please delete "Ob" and substitute --OB-- therefor.

At page 42, line 10, please delete "*ob*" and substitute --*OB*-- therefor.

At page 42, line 13, please delete "See," and substitute --*See*,-- therefor.

At page 42, line 13-15, please delete "Sambrook, Fritsch & Maniatis, *Molecular Cloning: A Laboratory Manual*, Second Edition (1989) Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York (herein "Sambrook et al., 1989" )" and substitute --Sambrook *et al.*, *Molecular Cloning: A Laboratory Manual*, Second Edition, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York (1989)-- therefor.

At page 42, line 15-16, please delete "*DNA Cloning: A Practical Approach*, Volumes I and II (D.N. Glover ed. 1985)" and substitute --Glover ed., *DNA Cloning: A Practical Approach*, Volumes I and II, MRL Press, Ltd., Oxford, U.K. (1985)-- therefor.

At page 42, line 16-17, please delete "*Oligonucleotide Synthesis* (M.J. Gait ed. 1984)" and substitute --Gait ed., *Oligonucleotide Synthesis*, Oxford University Press (1984)-- therefor.

At page 42, line 17-18, please delete "*Nucleic Acid Hybridization* [B.D. Hames & S.J. Higgins eds. (1985)]" and substitute --Hames *et al.*, eds., *Nucleic Acid Hybridization*, Springer-Verlag (1985)-- therefor.

At page 42, line 18-19, please delete "*Transcription And Translation* [B.D. Hames & S.J. Higgins, eds. (1984)]" and substitute --Hames *et al.*, eds. *Transcription And Translation*, Oxford University Press (1984)-- therefor.

At page 42, line 19-20, please delete "*Animal Cell Culture* [R.I. Freshney, ed. (1986)]" and substitute --Freshney ed., *Animal Cell Culture*, Oxford University Press (1986)-- therefor.



At page 42, line 20, please delete "*Immobilized Cells And Enzymes* [IRL Press, (1986)]" and substitute --*Immobilized Cells And Enzymes*, IRL Press-(1986)-- therefor.

At page 42, line 20-21, please delete "B. Perbal, *A Practical Guide To Molecular Cloning* (1984)" and substitute --Perbal, *A Practical Guide To Molecular Cloning*, Wiley, New York (1984)-- therefor.

At page 42, line 25, please delete "(e.g.," and substitute --(e.g.,-- therefor.

At page 43, line 21, please delete "single stranded" and substitute --single-stranded-- therefor.

At page 43, line 22, please delete "Double stranded" and substitute --Double-stranded-- therefor.

At page 44, line 8, please delete "single stranded" and substitute --single-stranded-- therefor.

At page 44, line 10, please delete "Sambrook et al.," and substitute --Sambrook *et al.*, 1989, *supra*-- therefor.

At page 44, line 13, please delete "55°," and substitute --55°C,-- therefor.

At page 44, line 28, please delete "Sambrook et al., *supra*, 9.50-0.51)." and substitute --Sambrook *et al.*, 1989, *supra*, 9.50-0.51).-- therefor.

At page 44, line 30, please delete "Sambrook et al., *supra*," and substitute --Sambrook et al., 1989, *supra*,-- therefor.

At page 45, line 21, please delete "ob" and substitute --OB-- therefor.

At page 45, line 24, please delete "FIGURE 1" and substitute --FIGURE 1A through D-- therefor.

At page 46, line 4-5, please delete "Glover, D.M. (ed.), 1985, *DNA Cloning: A Practical Approach*, MRL Press, Ltd., Oxford, U.K. Vol. I, II)" and substitute --(Glover, 1985, *supra*)-- therefor.

At page 46, line 6, please delete "intron" and substitute --intronic-- therefor.

At page 46, line 14, please delete "DNase" and substitute --DNase-- therefor.

At page 46, line 20, please delete "*ob*" and substitute --OB-- therefore.

At page 46, line 20, please delete "*ob*-like" and substitute --OB-like-- therefor.

At page 46, line 21, please delete "ob" and substitute --OB-- therefor.

At page 46, line 21, please delete "ob-like" and substitute --OB-like-- therefor.

At page 46, line 24, please delete "to the labeled probe" and substitute --to a labeled probe-- therefor.

At page 46, line 24-25, please delete "(Benton and Davis, 1977, *Science* 196:180;" and substitute --[Benton *et al.*, *Science*, 196:180 (1977);-- therefor.

At page 46, line 25, please delete "Grunstein and Hogness, 1975, *Proc. Natl. Acad. Sci. U.S.A.* 72:3961)" and substitute --Grunstein *et al.*, *Proc. Natl. Acad. Sci. USA*, 72:3961 (1975)]-- therefor.

At page 46, line 29, please delete "Figure 1" and substitute --Figure 1A through E-- therefor.

At page 47, line 1, please delete "Figure 2" and substitute --Figure 2A and B-- therefor.

At page 47, line 4, please delete "stringent hybridization conditions" and substitute -stringent the hybridization conditions that -- therefor.

At page 47, line 9, please delete "Figure 1 (SEQ ID NO:1) or Figure 2 (SEQ ID NO:3)," and substitute --Figure 1A through E (SEQ ID NO:1) or Figure 2A and B (SEQ ID NO:3),-- therefor.

At page 48, line 13, please delete "See, e.g.," and substitute --See, e.g.,-- therefor.

At page 48, line 14-15, please delete "Jay *et al.*, *J. Biol. Chem.*, 259:6311 (1984)." and substitute --Jay *et al.*, *J. Biol. Chem.*, 259:6311 (1984).-- therefor.

At page 48, line 18, please delete "ob" and substitute --OB-- therefor.

At page 48, line 22-23, please delete "Christopher J. Noren, Spencer J. Anthony-Cahill, Michael C. Griffith, Peter G. Schultz, *Science*, 244:182-188 (April 1989)." and substitute --Noren *et al.*, *Science*, 244:182-188 (1989).-- therefor.

At page 48, line 24, please delete "ob" and substitute --OB-- therefor.

At page 49, line 7, please delete "(See Weintraub, 1990;" and substitute --[See, Weintraub, *Sci. Am.*, 262:40-46 (1990);-- therefor.

At page 49, line 8, please delete "Marcus-Sekura, 1988)." and substitute --Marcus-Sekura, *Anal. Biochem.*, 172:289-295 (1988)].-- therefor.

At page 49, line 9, please delete "double stranded" and substitute --double-stranded-- therefor.

At page 49, line 15-16, please delete "(Marcus-Sekura, 1988; Hambor et al., 1988)." and substitute --[Marcus-Sekura, 1988, *supra*; Hambor et al., *J. Exp. Med.*, 168:1237-1245 (1988)].-- therefor.

At page 49, line 18, please delete "single stranded" and substitute --single-stranded-- therefor.

At page 49, line 23, please delete "(Cech, 1988)." and substitute --[Cech, *J. Am. Med. Assoc.*, 260:3030-3034 (1988)].-- therefor.

At page 49, line 26, please delete "(Hasselhoff and Gerlach, 1988)".

At page 50, line 1, please delete "MRNA" and substitute --mRNA-- therefor.

At page 50, line 7, please delete "ob" and substitute --OB-- therefor.

At page 50, line 10, please delete at first instance of "ob" and substitute --OB-- therefor.

At page 50, line 10, please delete at second instance of "ob" and substitute --OB-- therefor.

At page 50, line 13, please delete "for polymerase chain reaction" and substitute --for the polymerase chain reaction-- therefor.

At page 50, line 14, please delete at first instance of "ob" and substitute --OB-- therefor.

At page 50, line 14, please delete at second instance of "ob" and substitute --OB-- therefor.

At page 50, line 15, please delete "ob" and substitute --OB-- therefor.

At page 50, line 19, please delete "ob" and substitute --OB-- therefor.

At page 50, line 19, please delete "higher level of" and substitute --higher levels of-- therefor.

At page 50, line 20, please delete "ob" and substitute --OB-- therefor.

At page 50, line 20, please delete "ob" and substitute --OB-- therefor.

At page 50, line 21, please delete "ob" and substitute --OB-- therefor.

At page 50, line 22, please delete "(see" and substitute --(See-- therefor.

At page 50, line 25, please delete "Kucherlaptati" and substitute --Kucherlapati-- therefor.

At page 50, line 26, please delete "Ob" and substitute --OB-- therefor.

At page 52, line 21, please delete "Synthetic" and substitute --synthetic-- therefor.

At page 52, line 22, please delete "e.g.," and substitute --e.g.,-- therefor.

At page 52, line 24, please delete "etc.," and substitute --etc.,-- therefor.

At page 52, line 24, please delete "e.g.," and substitute --e.g.,-- therefor.

At page 52, line 25, please delete both occurrences of "e.g.," and substitute --e.g.,-- therefor.

At page 52, line 26, please delete "Filamentous single stranded" and substitute --filamentous single-stranded-- therefor.

At page 53, line 3, please delete "*ob*" and substitute --*OB*-- therefor.

At page 53, line 5, please delete "Brierley et al.;" and substitute --Brierley *et al.*;-- therefor.

At page 53, line 6, please delete "Siegel et al.)." and substitute --Siegel *et al.*).-- therefor.

At page 53, line 7, please delete "*ob*" and substitute --*OB*-- therefor.

At page 53, line 17, please delete "e.g.," and substitute --e.g.,-- therefor.

At page 53, line 26, please delete "L-M cells," and substitute --LM cells,-- therefor.

At page 54, line 20, please delete "factors a person" and substitute --factors, a person-- therefor.

At page 54, line 24, please delete at first instance of "*ob*" and substitute --*OB*-- therefor.

At page 54, line 24, please delete at second instance of "*ob*" and substitute --*OB*-- therefor.

At page 54, line 25, please delete "non-*ob*" and substitute --non-*OB*-- therefor.

At page 54, line 26, please delete "ob" and substitute --OB-- therefor.

At page 54, line 27, please delete "non-ob" and substitute --non-OB-- therefor.

At page 54, line 27, please delete "ob" and substitute --OB-- therefor.

At page 54, line 28, please delete "ob" and substitute --OB-- therefor.

At page 55, line 1, please delete "non-ob" and substitute --non-OB-- therefor.

At page 55, line 2, please delete "amino terminus" and substitute --amino-terminus-- therefor.

At page 55, line 2, please delete "ob" and substitute --OB-- therefor.

At page 55, line 4, please delete "non-ob protein joined in-frame to the ob" and substitute --non-OB protein joined in-frame to the OB-- therefor.

At page 55, line 6, please delete "ob-non-ob" and substitute --OB-non-OB-- therefor.

At page 55, line 9, please delete "ob" and substitute --OB-- therefor.

At page 55, line 10, please delete "ob" and substitute --OB-- therefor.

At page 55, line 14, please delete "(HIS-TAG)" and substitute --(His-tag)-- therefor.

At page 55, line 18, please delete "full length" and substitute --full-length-- therefor.

At page 55, line 19, please delete "ob" and substitute --OB-- therefor.

At page 55, line 20, please delete "(Smith and Johnson, 1988, Gene 67:31-40)" and substitute --[Smith *et al.*, *Gene*, 67:31-40 (1988)]-- therefor.

At page 56, line 3, please delete "ob" and substitute --OB-- therefor.

At page 56, line 4, please delete "ob" and substitute --OB-- therefor.

At page 57, line 4, please delete "(Sigma)" and substitute --(Sigma, St. Louis, Missouri)-- therefor.

At page 57, line 8, please delete "BamHI" and substitute --*Bam*HI-- therefor.

At page 57, line 9, please delete "BamH1, SmaI, XbaI, EcoRI, NotI, XmaI, BglII,

and PstI" and substitute --*Bam*HI, *Sma*I, *Xba*I, *Eco*RI, *Not*I, *Xma*I, *Bgl*II, and *Pst*I-- therefor.

At page 57, line 10, please delete "BglII, PstI, NotI, XmaIII, EcoRI, XbaI, SmaI, and BamH1" and substitute --*Bgl*II, *Pst*I, *Not*I, *Xma*II, *Eco*RI, *Xba*I, *Sma*I, and *Bam*HI-- therefor.

At page 57, line 11, please delete "BamH1, BglII, PstI" and substitute --*Bam*HI, *Bgl*II, *Pst*I-- therefor.

At page 57, line 12, please delete "NcoI and HindIII" and substitute --*Nco*I, and *Hind*III-- therefor.

At page 57, line 14, please delete "BamH1 and KpnI" and substitute --*Bam*HI and *Kpn*I-- therefor.

At page 57, line 14, please delete "BamH1" and substitute --*Bam*HI-- therefor.

At page 57, line 16, please delete "BamH1" and substitute --*Bam*HI-- therefor.

At page 57, line 18, please delete "BamH1, BglII, PstI, NcoI, and HindIII" and substitute --*Bam*HI, *Bgl*II, *Pst*I, *Nco*I, and *Hind*III-- therefor.

At page 57, line 22, please delete "such as dihydrofolate reductase (DHFR)," and substitute --such as the dihydrofolate reductase (DHFR) promoter,-- therefor.

At page 57, line 23, please delete "DHFR" and substitute --*DHFR*-- therefor.

At page 57, line 23, please delete "DHFR/methotrexate" and substitute --*DHFR*/methotrexate-- therefor.

At page 57, line 24-26, please delete "(PstI, SalI, SbaI, SmaI, and EcoRI cloning site, with the vector expressing both the cloned gene and DHFR; *see* Kaufman, *Current Protocols in Molecular Biology*, 16:12, 1991)" and substitute --(*Pst*I, *Sal*I, *Sba*I, *Sma*I, and *Eco*RI cloning site, with the vector expressing both the cloned gene and *DHFR*; Kaufman, *Current Protocols in Molecular Biology*, 16:12 (1991)-- therefor.

At page 57, line 28, please delete "HindIII, XbaI, SmaI, SmaI, EcoRI, and BclI" and substitute --*Hind*III, *Xba*I, *Sma*I, *Sba*I, *Eco*RI, and *Bcl*I-- therefor.

At page 58, line 2, please delete "BamH1, SfiI, XhoI, NotI, NheI," and substitute --*Bam*HI, *Sfi*I, *Xho*I, *Not*I, *Nhe*I,-- therefor.

At page 58, line 3, please delete "HindIII, NheI, PvuII, and KpnI" and substitute --*Hind*III, *Nhe*I, *Pvu*II, and *Kpn*I-- therefor.

At page 58, line 3, please delete "RSV LTR" and substitute --RSV-LTR-- therefor.

At page 58, line 4, please delete "BamHI, SfiI, XhoI, NotI," and substitute --*BamHI, SfiI, XhoI, NotI*-- therefor.

At page 58, line 5, please delete "NheI, HindIII, NheI, PvuII, and KpnI" and substitute --*NheI, HindIII, NheI, PvuII, and KpnI*-- therefor.

At page 58, line 6, please delete "KpnI, PvuI," and substitute --*KpnI, PvuI*-- therefor.

At page 58, line 7, please delete "NheI, HindIII, NotI, XhoI, SfiI, BamHI" and substitute --*NheI, HindIII, NotI, XhoI, SfiI, BamHI*-- therefor.

At page 58, line 8, please delete "BamHI" and substitute --*BamHI*-- therefor.

At page 58, line 9, please delete "XhoI, NotI, HindIII, NheI, and KpnI" and substitute --*XhoI, NotI, HindIII, NheI, and KpnI*-- therefor.

At page 58, line 9, please delete "RSV LTR" and substitute --RSV-LTR-- therefor.

At page 58, line 10, please delete "KpnI, NheI, HindIII, NotI, XhoI, SfiI," and substitute --*KpnI, NheI, HindIII, NotI, XhoI, SfiI*-- therefor.

At page 58, line 11, please delete "BamHI" and substitute --*BamHI*-- therefor.

At page 58, line 11, please delete "RSV LTR" and substitute --RSV-LTR-- therefor.

At page 58, line 12, please delete "RSV LTR" and substitute --RSV-LTR-- therefor.

At page 58, line 15, please delete "HindIII, BstXI, NotI, SbaI, and ApaI" and substitute --*HindIII, BstXI, NotI, SbaI, and ApaI*-- therefor.

At page 58, line 16, please delete "HindIII, SpeI, BstXI, NotI, XbaI" and substitute --*HindIII, SpeI, BstXI, NotI, XbaI*-- therefor.

At page 58, line 18, please delete "(see, Kaufman, *supra*)" and substitute --(see, Kaufman, 1991, *supra*)-- therefor.

At page 58, line 19, please delete "SmaI cloning" and substitute --*SmaI cloning*-- therefor.

At page 58, line 19, please delete "SalI," and substitute --*SalI*-- therefor.

At page 58, line 20, please delete "SmaI, AflI, NarI, BspMII, BamHI, ApaI, NheI,

SacII, KpnI, and HindIII" and substitute --*SmaI*, *AflI*, *NarI*, *BspMII*, *BamHI*, *ApaI*, *NheI*, *SacII*, *KpnI*, and *HindIII*-- therefor.

At page 58, line 21, please delete "EcoRI, PstI, SalI, AccI, HindII," and substitute --*EcoRI*, *PstI*, *SalI*, *AccI*, *HindII*-- therefor.

At page 58, line 22, please delete "SbaI, BamHI, and Hpa" and substitute --*SbaI*, *BamHI*, and *Hpa*-- therefor.

At page 58, line 23, please delete "ob" and substitute --OB-- therefor.

At page 58, line 24, please delete "XbaI, SphI, ShoI, NotI," and substitute --*XbaI*, *SphI*, *ShoI*, *NotI*-- therefor.

At page 58, line 25, please delete "GstXI, EcoRI, BstXI, BamHI, SacI, KpnI, and HindIII" and substitute --*GstXI*, *EcoRI*, *BstXI*, *BamHI*, *SacI*, *KpnI* and *HindIII*-- therefor.

At page 58, line 26, please delete "XbaI, SphI, ShoI, NotI, BstXI, EcoRI, BamHI," and substitute --*XbaI*, *SphI*, *ShoI*, *NotI*, *BstXI*, *EcoRI*, *BamHI*-- therefor.

At page 58, line 27, please delete "SacI, KpnI, and HindIII" and substitute --*SacI*, *KpnI*, and *HindIII*-- therefor.

At page 59, line 3, please delete "ob" and substitute --OB-- therefor.

At page 59, line 4, please delete "ob" and substitute --OB-- therefor.

At page 59, line 7, please delete "ob" and substitute --OB-- therefor.

At page 59, line 9, please delete "well known" and substitute --well-known-- therefor.

At page 59, line 10, please delete "Ob" and substitute --OB-- therefor.

At page 59, line 11, please delete "ob" and substitute --OB-- therefor.

At page 59, line 14, please delete "ob" and substitute --OB-- therefor.

At page 60, line 17, please delete "Theofilopolous et al." and substitute --Theofilopolous *et al.*-- therefor.

At page 61, line 2, please delete "e.g.," and substitute --*e.g.*-- therefor.

At page 61, line 6-7, please delete "(Hood et al., *Immunology*, Second Ed., 1984, Benjamin/Cummings: Menlo Park, California, p. 384)" and substitute --[Hood *et al.*, in *Immunology*, p. 384, Second Ed., Benjamin/Cummings, Menlo Park, California (1984)]--



therefor.

At page 61, line 17, please delete "ob" and substitute --OB-- therefor.

At page 61, line 19, please delete "ob" and substitute --OB-- therefor.

At page 61, line 21, please delete "ob" and substitute --OB-- therefor.

At page 62, line 1, please delete "ob" and substitute --OB-- therefor.

At page 62, line 5, please delete "(1975, Nature 256:495-497)" and substitute --Kohler *et al.*, *Nature*, 256:495-497 (1975)-- therefor.

At page 62, line 6-7, please delete "(Kozbor *et al.*, 1983, Immunology Today 4:72)" and substitute --[Kozbor *et al.*, *Immunology Today*, 4:72 (1983)]-- therefor.

At page 62, line 8-9, please delete "(Cole *et al.*, 1985, in *Monoclonal Antibodies and Cancer Therapy*, Alan R. Liss, Inc., pp. 77-96)" and substitute --[Cole *et al.*, in *Monoclonal Antibodies and Cancer Therapy*, pp. 77-96, Alan R. Liss, Inc., (1985)]-- therefor.

At page 62, line 11-15, please delete "*See, e.g.*, M. Schreier *et al.*, "Hybridoma Techniques" (1980); Hammerling *et al.*, "Monoclonal Antibodies And T-cell Hybridomas" (1981); Kennett *et al.*, "Monoclonal Antibodies" (1980); see also U.S. Patent Nos. 4,341,761; 4,399,121; 4,427,783; 4,444,887; 4,451,570; 4,466,917; 4,472,500; 4,491,632; 4,493,890." and substitute --*See, e.g.*, M. Schreier *et al.*, "Hybridoma Techniques" (1980); Hammerling *et al.*, "Monoclonal Antibodies And T-cell Hybridomas" (1981); Kennett *et al.*, "Monoclonal Antibodies" (1980); see also U.S. Patent Nos. 4,341,761; 4,399,121; 4,427,783; 4,444,887; 4,451,570; 4,466,917; 4,472,500; 4,491,632; and 4,493,890.-- therefor.

At page 62, line 19-20, please delete "(Cote *et al.*, 1983, Proc. Natl. Acad. Sci. U.S.A. 80:2026-2030)" and substitute --[Cote *et al.*, *Proc. Natl. Acad. Sci. USA*, 80:2026-2030 (1983)]-- therefor.

At page 62, line 20-23, please delete "(Cole *et al.*, 1985, in *Monoclonal Antibodies and Cancer Therapy*, Alan R. Liss, pp. 77-96)" and substitute --(Cole *et al.*, 1985, *supra*)-- therefor.

At page 62, line 23, please delete "(Morrison *et al.*, 1984, J. Bacteriol. 159-870;" and substitute --[Morrison *et al.*, *J. Bacteriol.*, 159-870 (1984);-- therefor.

At page 62, line 23-24, please delete "Neuberger *et al.*, 1984, Nature 312:604-608;" and substitute --Neuberger *et al.*, *Nature*, 312:604-608 (1984);-- therefor.

At page 62, line 24, please delete "Takeda et al., 1985, Nature 314:452-454)" and substitute --Takeda *et al.*, *Nature*, 314:452-454 (1985)]-- therefor.

At page 63, line 4, please delete "ob" and substitute --OB-- therefor.

At page 63, line 5, please delete "single chain" and substitute --single-chain-- therefor.

At page 63, line 7, please delete "(Huse et al., 1989, Science 246:1275-1281)" and substitute --[Huse *et al.*, *Science*, 246:1275-1281 (1989)]-- therefor.

At page 63, line 8, please delete "ob" and substitute --OB-- therefor.

At page 63, line 21, please delete "western blots" and substitute --Western blots-- therefor.

At page 64, line 2, please delete "ob" and substitute --OB-- therefor.

At page 64, line 3, please delete "ob" and substitute --OB-- therefor.

At page 64, line 4, please delete "ob" and substitute --OB-- therefor.

At page 64, line 5, please delete "ob" and substitute --OB-- therefor.

At page 64, line 8, please delete "ob" and substitute --OB-- therefor.

At page 64, line 9, please delete "ob" and substitute --OB-- therefor.

At page 64, line 11, please delete "ob" and substitute --OB-- therefor.

At page 64, line 20, please delete "Freunds" and substitute --Freund's-- therefor.

At page 64, line 21, please delete "gex" and substitute --pGEX-- therefor.

At page 64, line 22, please delete "(Smith and Johnson, *supra*)" and substitute --(Smith *et al.*, 1988, *supra*)-- therefor.

At page 64, line 24, please delete "Freunds" and substitute --Freund's-- therefor.

At page 64, line 25, please delete "ob" and substitute --OB-- therefor.

At page 64, line 26, please delete "anti-ob" and substitute --anti-OB-- therefor.

At page 65, line 1, please delete "ob-column." and substitute --OB-column.-- therefor.

At page 65, line 3, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 65, line 4, please delete "ob" and substitute --OB-- therefor.

At page 65, line 5, please delete "anti-ob" and substitute --anti-OB-- therefor.

At page 65, line 8, please delete "ob" and substitute --OB-- therefor.

At page 65, line 14, please delete "i.e." and substitute --*i.e.*-- therefor.

At page 65, line 20, please delete "affinity purified" and substitute --affinity-purified-- therefor.

At page 65, line 26, please delete "that impact" and substitute --that impact upon-- therefor.

At page 66, line 6, please delete "alternatively," and substitute --Alternatively,-- therefor.

At page 66, line 17, please delete "condition where" and substitute --conditions where-- therefor.

At page 66, line 22, please delete "modulators" and substitute --modulators and other-- therefor.

At page 66, line 28, please delete "techniques such" and substitute --techniques, such-- therefor.

At page 67, line 5, please delete "weight modulator" and substitute --weight modulators-- therefor.

At page 67, line 14, please delete "B.  $WM + Ab^* = WMAb_1^*$ " and substitute --B.  $WM + Ab_* = WMAb_1^*$ -- therefor.

At page 67, line 19, please delete "of the well" and substitute --of well-- therefor.

At page 68, line 2, please delete "Ab<sub>1</sub> raised in one mammalian species has" and substitute --Ab<sub>1</sub>, raised in one mammalian species, has-- therefor.

At page 68, line 3, please delete "antibody Ab<sub>2</sub>." and substitute --antibody, Ab<sub>2</sub>.-- therefor.

At page 69, line 5, please delete "capability in" and substitute --capability of *OB* in-- therefor.

At page 69, line 9, please delete "e.g., "competitive", "sandwich", " and substitute

--e.g., "competitive," "sandwich,"-- therefor.

At page 69, line 11, please delete "etc." and substitute --etc.--therefor.

At page 69, line 22, please delete "etc." and substitute --etc.--therefor.

At page 70, line 2, please delete "e.g. "competitive", " and substitute --e.g. "competitive,"-- therefor.

At page 70, line 3, please delete "'sandwich", "double antibody", etc." and substitute --"sandwich," "double antibody," etc.-- therefor.

At page 70, line 21, please delete "ob" and substitute --OB-- therefor.

At page 70, line 24, please delete at first instance of "ob" and substitute --OB-- therefor.

At page 70, line 24, please delete at second instance of "ob" and substitute --OB-- therefor.

At page 70, line 25, please delete "db/db" and substitute --db/db-- therefor.

At page 70, line 25, please delete "ob" and substitute --OB-- therefor.

At page 71, line 3, please delete "(see Figure 20)." and substitute --(see Figure 20A through C; SEQ ID NO:22).-- therefor.

At page 71, line 4, please delete "ob" and substitute --OB-- therefor.

At page 71, line 5, please delete "ob" and substitute --OB-- therefor.

At page 71, line 6, please delete "ob" and substitute --OB-- therefor.

At page 71, line 8, please delete "ob" and substitute --OB-- therefor.

At page 71, line 11, please delete "sequence based diagnostic tests obesity" and substitute --sequence-based diagnostic tests for obesity-- therefor.

At page 71, line 16, please delete "ob" and substitute --OB-- therefor.

At page 71, line 17, please delete "Figure 20A," and substitute --Figure 20A through C,-- therefor.

At page 71, line 18, please delete "ob" and substitute --OB-- therefor.

At page 71, line 20, please delete "ob" and substitute --OB-- therefor.

At page 71, line 21, please delete "ob" and substitute --OB-- therefor.

At page 71, line 22, please delete at first instance of "ob" and substitute --OB-- therefor.

At page 71, line 22, please delete at second instance "ob" and substitute --OB-- therefor.

At page 71, line 23, please delete "ob" and substitute --OB-- therefor.

At page 71, line 24, please delete "ob" and substitute --OB-- therefor.

At page 71, line 25, please delete "ob" and substitute --OB-- therefor.

At page 71, line 26, please delete "ob" and substitute --OB-- therefor.

At page 72, line 2, please delete "ob" and substitute --OB-- therefor.

At page 72, line 4, please delete "ob" and substitute --OB-- therefor.

At page 72, line 12, please delete "similar" and substitute --similarly-- therefor.

At page 72, line 15, please delete "Federal" and substitute --federal-- therefor.

At page 72, line 15, please delete "U.S. Pharmacopeia" and substitute --U.S. *Pharmacopeia*-- therefor.

At page 72, line 21, please delete "Water or aqueous solution " and substitute --Water or solution -- therefor.

At page 72, line 24, please delete ""Remington's Pharmaceutical Sciences" by E.W. Martin." and substitute --Martin, *Remington's Pharmaceutical Sciences*, 18th Ed., Mack Publishing Co., Easton, PA (1990).-- therefor.

At page 72, line 26, please delete "15 percent" and substitute --15%-- therefor.

At page 72, line 26, please delete "50 percent" and substitute --50%-- therefor.

At page 72, line 27, please delete "90 percent" and substitute --90%-- therefor.

At page 73, line 3, please delete "ob" and substitute --OB-- therefor.

At page 73, line 4, please delete "Ob" and substitute --OB-- therefor.

At page 73, line 7, please delete "ob" and substitute --OB-- therefor.

At page 73, line 12, please delete "ob" and substitute --OB-- therefor.

At page 73, line 16, please delete "analysis the ob" and substitute --analysis, the OB-- therefor.

At page 73, line 17, please delete "particular mice" and substitute --particular, mice-- therefor.

At page 73, line 19, please delete "ob" and substitute --OB-- therefor.

At page 73, line 21, please delete "ob" and substitute --OB-- therefor.

At page 73, lines 24, please delete "ob" and substitute --OB-- therefor.

At page 73, line 27, please delete "(see Langer, *supra*; Sefton, *CRC Crit. Ref.* " and substitute --[Langer *et al.*, eds., *Medical Applications of Controlled Release*, CRC Pres., Boca Raton, Florida (1974)-- therefor.

At page 74, line 1-2, please delete "*Biomed. Eng.* 14:201 (1987); Buchwald *et al.*, *Surgery* 88:507 (1980); Saudek *et al.*, *N. Engl. J. Med.* 321:574 (1989))." and substitute --Sefton, *CRC Crit. Ref. Biomed. Eng.*, 14:201 (1987); Buchwald *et al.*, *Surgery*, 88:507 (1980); Saudek *et al.*, *N. Engl. J. Med.*, 321:574 (1989)].-- therefor.

At page 74, line 3-8, please delete "(see *Medical Applications of Controlled Release*, Langer and Wise (eds.), CRC Pres., Boca Raton, Florida (1974); *Controlled Drug Bioavailability, Drug Product Design and Performance*, Smolen and Ball (eds.), Wiley, New York (1984); Ranger and Peppas, *J. Macromol. Sci. Rev. Macromol. Chem.* 23:61 (1983); see also Levy *et al.*, *Science* 228:190 (1985); During *et al.*, *Ann. Neurol.* 25:351 (1989); Howard *et al.*, *J. Neurosurg.* 71:105 (1989))." and substitute --[see, Langer, 1974, *supra*; Sefton, 1987, *supra*; Smolen *et al.*, eds., *Controlled Drug Bioavailability, Drug Product Design and Performance*, Wiley, New York (1984); Ranger *et al.*, *J. Macromol. Sci. Rev. Macromol. Chem.*, 23:61 (1983); see also, Levy *et al.*, *Science*, 228:190 (1985); During *et al.*, *Ann. Neurol.*, 25:351 (1989); Howard *et al.*, *J. Neurosurg.*, 71:105 (1989)].-- therefor.

At page 74, line 10, please delete "i.e." and substitute --i.e.-- therefor.

At page 74, line 11-12, please delete "(see, e.g., Goodson, in *Medical Applications of Controlled Release*, *supra*, vol. 2, pp. 115-138 (1984))" and substitute --[see, e.g., Goodson, in *Medical Applications of Controlled Release*, vol. 2, pp. 115-138 (1984)]-- therefor.

At page 74, line 13, please delete "Langer (*Science* 249:1527-1533 (1990))." and substitute --Langer, *Science*, 249:1527-1533 (1990).-- therefor.

At page 74, line 14-15, please delete "(see Langer, *Science* 249:1527-1533 (1990));"

and substitute --(see Langer, 1990, *supra*);-- therefor.

At page 74, line 15-17, please delete "Treat et al., in *Liposomes in the Therapy of Infectious Disease and Cancer*, Lopez-Berestein and Fidler (eds.), Liss, New York, pp. 353-365 (1989);" and substitute --Treat *et al.*, in *Liposomes in the Therapy of Infectious Disease and Cancer*, Lopez-Berestein and Fidler (eds.), Liss, New York pp. 353-365 (1989);-- therefor.

At page 74, line 17, please delete "Lopez-Berestein, *ibid.*, pp. 317-327;" and substitute --Lopez-Berestein, pp. 317-327;-- therefor.

At page 74, line 17, please delete "see generally" and substitute --*see generally*-- therefor.

At page 74, line 19, please delete "ob" and substitute --OB-- therefor.

At page 74, line 21, please delete at first instance of "ob" and substitute --OB-- therefor.

At page 74, line 21, please delete at second instance of "ob" and substitute --OB-- therefor.

At page 74, line 25, please delete "ob" and substitute --OB-- therefor.

At page 74, line 26, please delete "ob" and substitute --OB-- therefor.

At page 74, line 28, please delete "ob" and substitute --OB-- therefor.

At page 75, line 14, please delete "e.g.," and substitute --*e.g.*,-- therefor.

At page 75, line 15, please delete "e.g.," and substitute --*e.g.*,-- therefor.

At page 75, line 16, please delete "(e.g., ascorbic acid, sodium metabisulfite)," and substitute --(*e.g.*, ascorbic acid, sodium metabisulfite),-- therefor.

At page 75, line 17, please delete "(e.g., Thimersol," and substitute --(*e.g.*, Thimersol,-- therefor.

At page 75, line 17, please delete "(e.g.," and substitute --(*e.g.*,-- therefor.

At page 75, line 22-24, please delete "Remington's Pharmaceutical Sciences, 18th Ed. (1990, Mack Publishing Co., Easton, PA 18042) pages 1435-1712" and substitute --Martin, pp. 1435-1712, 1990, *supra*,-- therefor.

At page 75, line 28-29, please delete "Remington's Pharmaceutical Sciences, 18th Ed. 1990 (Mack Publishing Co. Easton PA 18042) at Chapter 89" and substitute --Martin,

Chapter 89, 1990, *supra*,-- therefor.

At page 76, line 5, please delete "E.g." and substitute --*e.g.*-- therefor.

At page 76, line 7-8, please delete "Marshall, K. In: *Modern Pharmaceutics* Edited by G.S. Banker and C.T. Rhodes Chapter 10, 1979," and substitute --Marshall, in *Modern Pharmaceutics*, Chapter 10, Banker and Rhodes ed., (1979),-- therefor.

At page 76, line 19, please delete "Polyethylene" and substitute --polyethylene-- therefor.

At page 76, line 21-23, please delete "Abuchowski and Davis, Soluble Polymer-Enzyme Adducts. In: "Enzymes as Drugs", Hocenberg and Roberts, eds., Wiley-Interscience, New York, NY, (1981), pp 367-383;" and substitute --Abuchowski *et al.*, 1981, *supra*;-- therefor.

At page 76, line 23-24, please delete "Newmark, et al., J. Appl. Biochem. 4: 185-189 (1982)." and substitute --Newmark *et al.*, J. Appl. Biochem., 4:185-189 (1982).-- therefor.

At page 77, line 6, please delete "gastric resistance a" and substitute --gastric resistance, a-- therefor.

At page 77, line 15, please delete "i.e." and substitute --*i.e.*-- therefor.

At page 78, line 8, please delete "disintegrates" and substitute --disintegrants-- therefor.

At page 78, line 25, please delete "limited to; stearic acid" and substitute --limited to: stearic acid-- therefor.

At page 79, line 1, please delete "weights, Carbowax" and substitute --weights, and Carbowax-- therefor.

At page 79, line 6, please delete "environment a surfactant" and substitute --environment, a surfactant-- therefor.

At page 79, line 21, please delete "i.e." and substitute --*i.e.*,-- therefor.

At page 79, line 23, please delete "i.e." and substitute --*i.e.*-- therefor.

At page 79, line 24, please delete "push drug" and substitute --push the drug-- therefor.

At page 79, line 25, please delete "entric" and substitute --enteric-- therefor.



At page 80, line 3, please delete "film coated tablet and the" and substitute --film-coated tablet; the-- therefor.

At page 80, line 17-28, please delete "(Other reports of this include Adjei et al., PHARMACEUTICAL RESEARCH, VOL. 7, No. 6, pp. 565-569 (1990); Adjei et al., *International Journal of Pharmaceutics*, Vol. 63, pp. 135-144 (1990)(leuprolide acetate); Braquet et al., *Journal of Cardiovascular Pharmacology*, Vol. 13, suppl. 5, s. 143-146 (1989)(endothelin-1); Hubbard et al., *Annals of Internal Medicine*, Vol. III, No. 3, pp. 206-212(1989)( $\alpha$ 1- antitrypsin); Smith et al., *J. Clin. Invest.*, Vol. 84, pp. 1145-1146 (1989)( $\alpha$ 1-proteinase); Oswein et al., "Aerosolization of Proteins", Proceedings of Symposium on Respiratory Drug Delivery II, Keystone, Colorado, March, 1990 (recombinant human growth hormone); Debs et al., *The Journal of Immunology*, Vol. 140, pp. 3482-3488 (1988)(interferon- $\gamma$  and tumor necrosis factor alpha) and Platz et al., U.S. Patent No. 5,284,656 (granulocyte colony stimulating factor)." and substitute --Other reports of this include Adjei et al., *Pharmaceutical Research*, 7(6):565-569 (1990); Adjei et al., *International Journal of Pharmaceutics*, 63:135-144 (1990) (leuprolide acetate); Braquet et al., *Journal of Cardiovascular Pharmacology*, 13(suppl. 5):143-146 (1989) (endothelin-1); Hubbard et al., *Annals of Internal Medicine*, 3(3):206-212 (1989) ( $\alpha$ 1-antitrypsin); Smith et al., *J. Clin. Invest.*, 84:1145-1146 (1989) ( $\alpha$ 1-proteinase); Oswein et al., "Aerosolization of Proteins", *Proceedings of Symposium on Respiratory Drug Delivery II*, Keystone, Colorado, (March 1990) (recombinant human growth hormone); Debs et al., *J. Immunol.*, 140:3482-3488 (1988) (interferon- $\gamma$  and tumor necrosis factor alpha) and Platz et al., U.S. Patent No. 5,284,656 (granulocyte colony stimulating factor).-- therefor.

At page 81, line 6, please delete "metered dose inhaler" and substitute --metered-dose inhaler-- therefor.

At page 81, line 20, please delete "mL" and substitute --ml-- therefor.

At page 81, line 21, please delete "e.g." and substitute --e.g.-- therefor.

At page 82, line 21, please delete "alleviated or" and substitute --alleviated by or-- therefor.

At page 82, line 27, please delete "ascertain proper" and substitute --ascertain the proper-- therefor.

At page 83, line 1, please delete "dosing" and substitute --dosage-- therefor.

At page 83, line 6, please delete "infusion" and substitute --infusion-- therefor.

At page 83, line 13, please delete "e.g." and substitute --e.g.-- therefor.

At page 83, line 15, please delete "in serriatim." and substitute --in seriatim.-- therefor.

At page 83, line 17, please delete "ob" and substitute --OB-- therefor.

At page 83, line 20, please delete "ob" and substitute --OB-- therefor.

At page 83, line 21, please delete "ob" and substitute --OB-- therefor.

At page 84, line 2-3, please delete "(Kaplitt et al., 1991, *Molec. Cell. Neurosci.* 2:320-330)," and substitute --[Kaplitt *et al.*, *Molec. Cell. Neurosci.*, 2:320-330 (1991)],-- therefor.

At page 84, line 4, please delete "Stratford-Perricaudet et al. (1992, *J. Clin. Invest.* 90:626-630)," and substitute --Stratford-Perricaudet *et al.*, *J. Clin. Invest.*, 90:626-630 (1992),-- therefor.

At page 84, line 5-6, please delete "(Samulski et al., 1987, *J. Virol.* 61:3096-3101; Samulski et al., 1989, *J. Virol.* 63:3822-3828)." and substitute --[Samulski *et al.*, *J. Virol.*, 61:3096-3101 (1987); Samulski *et al.*, *J. Virol.*, 63:3822-3828 (1989)].-- therefor.

At page 84, line 7, please delete "embodiment the gene" and substitute --embodiment, the gene-- therefor.

At page 84, line 8, please delete "Anderson et al.," and substitute --Anderson *et al.*,-- therefor.

At page 84, line 8-9, please delete "Mann et al., 1983, *Cell* 33:153;" and substitute --Mann *et al.*, *Cell*, 33:153 (1983);-- therefor.

At page 84, line 10, please delete "Markowitz et al., 1988, *J. Virol.* 62:1120;" and substitute --Markowitz *et al.*, *J. Virol.*, 62:1120 (1988);-- therefor.

At page 84, line 12, please delete "Dougherty et al.; and Kuo et al., 1993, *Blood* 82:845." and substitute --Dougherty *et al.*; and Kuo *et al.*, *Blood*, 82:845 (1993).-- therefor.

At page 84, line 18, please delete "(Felgner, et. al., 1987, *Proc. Natl. Acad. Sci. U.S.A.* 84:7413-7417;" and substitute --[Felgner *et al.*, *Proc. Natl. Acad. Sci. USA*, 84:7413-7417 (1987);-- therefor.

At page 84, line 18-19, please delete "Mackey, et al., 1988, *Proc. Natl. Acad. Sci. U.S.A.* 85:8027-8031)." and substitute --Mackey *et al.*, *Proc. Natl. Acad. Sci. USA*, 85:8027-8031 (1988)].-- therefor.

At page 84, line 21-22, please delete "(Felgner and Ringold, 1989, *Science* 337:387-388)." and substitute --[Felgner *et al.*, *Science*, 337:387-388 (1989)].-- therefor.

At page 84, line 23, please delete "into the specific" and substitute --into specific--

therefor.

At page 84, line 26, please delete "such as pancrease, liver" and substitute --such as the pancreas, liver-- therefor.

At page 84, line 27, please delete "and the brain." and substitute --and brain.-- therefor.

At page 84, line 28, please delete "Mackey, et. al., 1988," and substitute --Mackey *et al.*, 1988, *supra*,-- therefor.

At page 85, line 7-8, please delete "(see, *e.g.*, Wu *et al.*, 1992, *J. Biol. Chem.* 267:963-967; Wu and Wu, 1988, *J. Biol. Chem.* 263:14621-14624; Hartmut *et al.*," and substitute --(*see, e.g.*, Wu *et al.*, *J. Biol. Chem.*, 267:963-967 (1992); Wu *et al.*, *J. Biol. Chem.*, 263:14621-14624 (1988); Hartmut *et al.*,-- therefor.

At page 85, line 12, please delete "*ob*" and substitute --*OB*-- therefor.

At page 85, line 12, please delete "*ob*" and substitute --*OB*-- therefor.

At page 85, line 13, please delete "the a probe" and substitute --the probe-- therefor.

At page 85, line 14, please delete "*ob*" and substitute --*OB*-- therefor.

At page 85, line 19, please delete "*ob*" and substitute --*OB*-- therefor.

At page 85, line 20, please delete "*ob*" and substitute --*OB*-- therefor.

At page 85, line 26, please delete "*ob*" and substitute --*OB*-- therefor.

At page 85, line 27, please delete "*ob*" and substitute --*OB*-- therefor.

At page 86, line 3, please delete "*ob*" and substitute --*OB*-- therefor.

At page 86, line 5, please delete "*ob*" and substitute --*OB*-- therefor.

At page 86, line 8, please delete "*ob* receptor, *i.e.*, antagonists of *ob* polypeptide." and substitute --*OB* receptor, *i.e.*, antagonists of the *OB* polypeptide.-- therefor.

At page 86, line 10, please delete "*ob*" and substitute --*OB*-- therefor.

At page 86, line 11, please delete "*ob*" and substitute --*OB*-- therefor.

At page 86, line 18, please delete "*ob*" and substitute --*OB*-- therefor.

At page 86, line 26, please delete "to mention some" and substitute --as examples-- therefor.

At page 87, line 3, please delete "ob" and substitute --OB-- therefor.

At page 87, line 10, please delete "ob" and substitute --OB-- therefor.

At page 87, line 13, please delete "ob" and substitute --OB-- therefor.

At page 87, line 14, please delete "ob" and substitute --OB-- therefor.

At page 87, line 16, please delete "ob" and substitute --OB-- therefor.

At page 87, line 21, please delete "ob" and substitute --OB-- therefor.

At page 87, line 22, please delete "ob" and substitute --OB-- therefor.

At page 87, line 26, please delete "ob" and substitute --OB-- therefor.

At page 87, line 28, please delete "ob" and substitute --OB-- therefor.

At page 88, line 2, please delete "ob" and substitute --OB-- therefor.

At page 88, line 23, please delete "db" and substitute --DB-- therefor.

At page 89, line 13, please delete "ob" and substitute --OB-- therefor.

At page 89, line 14, please delete "ob" and substitute --OB-- therefor.

At page 89, line 15, please delete "ob" and substitute --OB-- therefor.

At page 89, line 16, please delete "labelling" and substitute --labeling-- therefor.

At page 89, line 17, please delete "ob" and substitute --OB-- therefor.

At page 89, line 19, please delete "ob" and substitute --OB-- therefor.

At page 89, line 20, please delete "ob" and substitute --OB-- therefor.

At page 89, line 24, please delete "ob" and substitute --OB-- therefor.

At page 89, line 26-27, please delete "(Pearson and Lipman, 1988, Proc. Natl. Acad. Sci. USA 85:2444-48)." and substitute --[Pearson *et al.*, *Proc. Natl. Acad. Sci. USA*, 85:2444-2448 (1988)].-- therefor.

At page 90, line 2, please delete "(e.g., Hopp and Woods, 1981, Proc. Natl. Acad.

Sci. U.S.A. 78:3824)." and substitute --(e.g., Hopp *et al.*, 1981, *supra*)-- therefor.

At page 90, line 4, please delete "ob" and substitute --OB-- therefor.

At page 90, line 6, please delete "(e.g., Chou and Fasman, 1974, *Biochemistry* 13:222)" and substitute --(e.g., Chou *et al.*, 1974, *supra*)-- therefor.

At page 90, line 7, please delete "ob" and substitute --OB-- therefor.

At page 90, line 12, please delete "ob" and substitute --OB-- therefor.

At page 90, line 13, please delete "ob" and substitute --OB-- therefor.

At page 90, line 13, please delete "db" and substitute --DB-- therefor.

At page 90, line 15, please delete "ob polypeptide" and substitute --OB polypeptide-- therefor.

At page 90, line 15, please delete "ob receptor" and substitute --OB receptor-- therefor.

At page 90, line 20-22, please delete "(Marion *et al.*, 1983, *Biochem. Biophys. Res. Comm.* 113:967-974; Bar *et al.*, 1985, *J. Magn. Reson.* 65:355-360; Kimura *et al.*, 1980, *Proc. Natl. Acad. Sci. U.S.A.* 77:1681-1685)." and substitute --(Marion *et al.*, 1983, *supra*; Bar *et al.*, 1985, *supra*; Kimura *et al.*, 1980, *supra*)-- therefor.

At page 90, line 23-24, please delete "(Engstrom, A., 1974, *Biochem. Exp. Biol.* 11:7-13)." and substitute --(Engstrom, 1974, *supra*)-- therefor.

At page 90, line 25, please delete "ob polypeptide" and substitute --OB polypeptide-- therefor.

At page 90, line 25, please delete "ob receptor" and substitute --OB receptor-- therefor.

At page 91, line 2-4, please delete "(Fletterick, R. and Zoller, M. (eds.), 1986, *Computer Graphics and Molecular Modeling*, in *Current Communications in Molecular Biology*, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York)." and substitute --[Fletterick *et al.*, eds., *Computer Graphics and Molecular Modeling*, in *Current Communications in Molecular Biology*, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York (1986)]-- therefor.

At page 91, line 5, please delete "ob" and substitute --OB-- therefor.

At page 91, line 9, please delete "According, in addition" and substitute --Accordingly, in addition-- therefor.

At page 91, line 10, please delete "structure of ob" and substitute --structure of the OB-- therefor.

At page 91, line 11, please delete "ob" and substitute --OB-- therefor.

At page 91, line 24, please delete "crosses and standard" and substitute --crosses, and standard-- therefor.

At page 91, line 26, please delete "ob" and substitute --OB-- therefor.

At page 92, line 4, please delete "(Friedman et al. *Genomics* 11: 1054-1062, 1991)." and substitute --(Friedman *et al.*, 1991, *supra*).-- therefor.

At page 92, line 5, please delete "ob" and substitute --OB-- therefor.

At page 92, line 6, please delete "carboxypeptidase" and substitute --*carboxypeptidase*-- therefor.

At page 92, line 9, please delete "ob" and substitute --OB-- therefor.

At page 92, line 13, please delete "(Bahary et al., *Mammalian Genome* 4: 511-515, 1993)." and substitute --[Bahary *et al.*, *Mammalian Genome*, 4:511-515 (1993)].-- therefor.

At page 92, line 14, please delete "ob" and substitute --OB-- therefor.

At page 92, line 16, please delete "ob" and substitute --OB-- therefor.

At page 92, line 17, please delete "ob" and substitute --OB-- therefor.

At page 92, line 19, please delete "et al." and substitute --*et al.*-- therefor.

At page 92, line 21, please delete "ob" and substitute --OB-- therefor.

At page 92, line 24, please delete "ob" and substitute --OB-- therefor.

At page 92, line 25, please delete "ob" and substitute --OB-- therefor.

At page 92, line 25, please delete "Pax-4" and substitute --*Pax4*-- therefor.

At page 92, line 26, please delete "ob" and substitute --OB-- therefor.

At page 92, line 26, please delete "Pax-4" and substitute --*Pax4*-- therefor.

At page 92, line 27, please delete "#111 and 420." and substitute --#111 and #420.- therefor.

At page 92, line 27, please delete "Pax-4" and substitute --Pax4-- therefor.

At page 92, line 28-29, please delete "(Gruss et al. *Genomics* 11:424-434, 1991)." and substitute --[Gruss *et al.*, *Genomics*, 11:424-434 (1991)].-- therefor.

At page 92, line 29, please delete "ob" and substitute --OB-- therefor.

At page 93, line 1, please delete "Pax-4" and substitute --Pax4-- therefor.

At page 93, line 2, please delete "ob" and substitute --OB-- therefor.

At page 93, line 6, please delete "1 million" and substitute --one million-- therefor.

At page 93, line 7, please delete "Firstly, yeast artificial" and substitute --Yeast artificial-- therefor.

At page 93, line 7, please delete "Pax-4" and substitute --Pax4-- therefor.

At page 93, line 9, please delete "(#8, 16, 107 and 24)" and substitute --(#8, #16, #107 and #24)-- therefor.

At page 93, line 12, please delete "ob" and substitute --OB-- therefor.

At page 93, line 13, please delete "ob" and substitute --OB-- therefor.

At page 93, line 13, please delete "Pax-4" and substitute --Pax4-- therefor.

At page 93, line 15, please delete "Pax-4" and substitute --Pax4-- therefor.

At page 93, line 22, please delete "is 370 kB" and substitute --is a 370 kb-- therefor.

At page 93, line 23, please delete "ob" and substitute --OB-- therefor.

At page 93, line 24, please delete "and 167" and substitute --and #167-- therefor.

At page 93, line 24, please delete "ob" and substitute --OB-- therefor.

At page 93, line 27, please delete "moire" and substitute --more-- therefor.

At page 94, line 5, please delete "was determined" and substitute --was determined to be-- therefor.

At page 94, line 11, please delete "which spanned" and substitute --spanning-- therefor.

At page 94, line 13, please delete "167" and substitute --#167-- therefor.

At page 94, line 13, please delete "ob" and substitute --OB-- therefor.

At page 94, line 15, please delete "ob" and substitute --OB-- therefor.

At page 94, line 17, please delete "proved" and substitute --found-- therefor.

At page 93, line 18, please delete "ob" and substitute --OB-- therefor.

At page 94, line 25, please delete "P1s were" and substitute --P1 clones were-- therefor.

At page 95, line 12, please delete "15" and substitute --fifteen-- therefor.

At page 95, line 14, please delete "conservative" and substitute --conserved-- therefor.

At page 95, line 14, please delete "15" and substitute --fifteen-- therefor.

At page 95, line 18-19, please delete "inosine monophosphate dihydrogenase (IMPDH)" and substitute --*inosine monophosphate dihydrogenase (IMPDH)*-- therefor.

At page 95, line 20, please delete at first instance "ob." and substitute --OB.-- therefor.

At page 95, line 20, please delete at second instance "ob" and substitute --OB-- therefor.

At page 95, line 22, please delete "ob" and substitute --OB-- therefor.

At page 95, line 23, please delete "ob" and substitute --OB-- therefor.

At page 95, line 28, please delete "ob" and substitute --OB-- therefor.

At page 96, line 1, please delete "and the fact" and substitute --and by the fact-- therefor.

At page 96, line 6, please delete "ob" and substitute --OB-- therefor.

At page 96, line 9, please delete "7 exons" and substitute --seven exons-- therefor.

At page 96, line 9, please delete "that 4" and substitute --that four-- therefor.

At page 96, line 19, please delete "(Tm = 60.0)" and substitute --(Tm = 60.0°C)-- therefor.



At page 96, line 20, please delete "(T<sub>m</sub> = 60.0)" and substitute --(T<sub>m</sub> = 60.0°C)-- therefor.

At page 96, line 22, please delete "55° annealing x 2', 72° extension x 2', 94° denaturation x 1'" and substitute --55°C annealing for 2', 72°C extension for 2', 94°C denaturation for 1'-- therefor.

At page 96, line 24, please delete "<sup>32</sup>P dCTP" and substitute --<sup>32</sup>P-dCTP-- therefor.

At page 97, line 1, please delete "RT PCR" and substitute --RT-PCR-- therefor.

At page 97, line 3, please delete "labelled 2G7" and substitute --labeled 2G7-- therefor.

At page 97, line 8, please delete "was hybridized" and substitute --was hybridized to the blot-- therefor.

At page 97, line 9, please delete "at 65°" and substitute --at 65°C -- therefor.

At page 97, line 9, please delete "Rapid Hype" and substitute --Rapid Hybe-- therefor.

At page 97, line 11, please delete "*ob*" and substitute --*OB*-- therefor.

At page 97, line 13, please delete "*ob*" and substitute --*OB*-- therefor.

At page 97, line 14, please delete "of DNA" and substitute --of the DNA-- therefor.

At page 97, line 15, please delete "wild type" and substitute --wild-type-- therefor.

At page 97, line 15, please delete "*ob*" and substitute --*OB*-- therefor.

At page 97, line 16, please delete "ob/ob (1J)" and substitute --*ob/ob* (1J)-- therefor.

At page 97, line 16, please delete "ob/ob (2J)" and substitute --*ob/ob* (2J)-- therefor.

At page 97, line 17, please delete "be referred hereinafter" and substitute --hereinafter be referred to-- therefor.

At page 97, line 20, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 97, line 20, please delete "SM/Ckc- + <sup>Dac</sup>-*ob*<sup>2J</sup>/*ob*<sup>2J</sup>). " and substitute --SM/Ckc- + <sup>Dac</sup>-*ob*<sup>2J</sup>/*ob*<sup>2J</sup>). -- therefor.

At page 97, line 24, please delete "single stranded" and substitute --single-stranded-- therefor.

At page 97, line 25, please delete "or commercially" and substitute --or with commercially-- therefor.

At page 97, line 26, please delete "RT PCR" and substitute --RT-PCR-- therefor.

At page 97, line 27, please delete "RT-PCT" and substitute --RT-PCR-- therefor.

At page 98, line 2, please delete "*ob*" and substitute --*OB*-- therefor.

At page 98, line 3, please delete "Since 2J" and substitute --Since the 2J-- therefor.

At page 98, line 5, please delete "*ob*" and substitute --*OB*-- therefor.

At page 98, line 6, please delete "of the mRNA" and substitute --of mRNA-- therefor.

At page 98, line 6, please delete "of signal" and substitute --of a signal-- therefor.

At page 98, line 7, please delete "RT-PCT" and substitute --RT-PCR-- therefor.

At page 98, line 9, please delete "RT PCR" and substitute --RT-PCR-- therefor.

At page 98, line 12, please delete "run out." and substitute --run out and blotted.-- therefor.

At page 98, line 12-13, please delete "PCR labeled" and substitute --PCR-labeled-- therefor.

At page 98, line 13, please delete "i.e." and substitute --*i.e.*-- therefor.

At page 98, line 15, please delete "*ob*" and substitute --*OB*-- therefor.

At page 98, line 17, please delete "2G7 RNA was absent" and substitute --2G7 specific RNA is absent-- therefor.

At page 98, line 18, please delete "*ob/ob*" and substitute --*ob/ob*-- therefor.

At page 98, line 20, please delete "*db/db*" and substitute --*db/db*-- therefor.

At page 98, line 21, please delete "*ob*" and substitute --*OB*-- therefor.

At page 98, line 23, please delete "*ob*" and substitute --*OB*-- therefor.

At page 99, line 2, please delete both occurrences of "ap2" and substitute --ap2-- therefor.

At page 99, line 3, please delete "ap2" and substitute --ap2-- therefor.

At page 99, line 3, please delete "RT PCR" and substitute --RT-PCR-- therefor.

At page 99, line 5, please delete "ob" and substitute --OB-- therefor.

At page 99, line 8, please delete "results in change" and substitute --results in a change-- therefor.

At page 99, line 10, please delete "see Figure 12" and substitute --see Figures 12-- therefor.

At page 99, line 11, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 99, line 13, please delete "ob" and substitute --OB-- therefor.

At page 99, line 20, please delete "was restriction digested" and substitute --was digested-- therefor.

At page 99, line 22-23, please delete "PCR labeled" and substitute --PCR-labeled-- therefor.

At page 99, line 23, please delete "BgIII" and substitute --BgIII-- therefor.

At page 99, line 24, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 99, line 24, please delete "ob<sup>2J</sup>/ob<sup>2J</sup>" and substitute --ob<sup>2J</sup>/ob<sup>2J</sup>-- therefor.

At page 99, line 26, please delete "southern blot" and substitute --Southern blot-- therefor.

At page 99, line 26, please delete "BgIII" and substitute --BgIII-- therefor.

At page 99, line 27, please delete "ob<sup>2J</sup>/+ x ob<sup>2J</sup>/+" and substitute --ob<sup>2J</sup>/+ x ob<sup>2J</sup>/+-- therefor.

At page 100, line 1, please delete "some have the both" and substitute --some have both-- therefor.

At page 100, line 2, please delete "ob<sup>2J</sup>/ob<sup>2J</sup>" and substitute --ob<sup>2J</sup>/ob<sup>2J</sup>-- therefor.

At page 100, line 4, please delete "ob" and substitute --OB-- therefor.

At page 100, line 5, please delete "50" and substitute --fifty-- therefor.

At page 100, line 11-12, please delete "PCR labeled" and substitute --PCR-labeled-- therefor.

At page 100, line 14, please delete "SRy Llim." and substitute --x-ray film.-- therefor.

At page 101, line 10, please delete "(SEQ ID NO:16)" and substitute --(SEQ ID NO:17)-- therefor.

At page 101, line 14, please delete "(SEQ ID NO:17)".

At page 101, line 22, please delete "carboxy terminal" and substitute --carboxy-terminal-- therefor.

At page 101, line 24-25, please delete "(*Nucl. Acids Res.* 14, 4683, 1986)" and substitute --, *Nucl. Acids Res.*, 14:4683 (1986).--.

At page 102, line 3, please delete "dibase" and substitute --dibasic-- therefor.

At page 102, line 4-5, please delete "(Sabatini and Adesnik, *The metabolic basis of inherited disease*, C.V. Scriver et al. eds., McGraw-Hill: New York, pp. 177-223)." and substitute --(Sabatini *et al.*, *The Metabolic Basis of Inherited Disease*, pp. 177-223, C.V. Scriver *et al.* eds., McGraw-Hill, New York).-- therefor.

At page 102, line 6, please delete "search" and substitute --searches-- therefor.

At page 102, line 7, please delete "sequence." and substitute --sequences.-- therefor.

At page 102, line 8, please delete "on Northern blot," and substitute --on Northern blots-- therefor.

At page 102, line 8, please delete "of similar" and substitute --of a similar-- therefor.

At page 102, line 9, please delete "ob" and substitute --OB-- therefor.

At page 102, line 10, please delete "ob" and substitute --OB-- therefor.

At page 102, line 10, please delete "encodes 167" and substitute --encodes a 167-- therefor.

At page 102, line 10-11, please delete "(Figures 2 and 3)." and substitute --(Figures 2A and B and Figure 3).-- therefor.

At page 102, line 11, please delete "cDNA with or without three base pairs deletion were" and substitute --cDNA, with or without three base pair deletions, were-- therefor.

At page 102, line 12, please delete "*ob*" and substitute --*OB*-- therefor.

At page 102, line 15, please delete "human *ob*" and substitute --human *OB*-- therefor.

At page 102, line 15, please delete "mouse *ob*" and substitute --mouse *OB*-- therefor.

At page 102, line 16, please delete "84" and substitute --83-- therefore.

At page 102, line 17, please delete "at amino acid" and substitute --at the amino acid-- therefor.

At page 102, line 22, please delete "drosophila" and substitute --*Drosophila*-- therefor.

At page 102, line 22, please delete "EcoR1" and substitute --*EcoRI*-- therefor.

At page 102, line 23, please delete "was transferred" and substitute --was then transferred-- therefor.

At page 102, line 24, please delete "imobilon" and substitute --immobilon-- therefor.

At page 102, line 24, please delete "PCR labeled" and substitute --PCR-labeled-- therefor.

At page 102, line 27, please delete "*ob*" and substitute --*OB*-- therefor.

At page 103, line 3, please delete "the *ob* and *db* genes." and substitute --the *OB* and *DB* genes.-- therefor.

At page 103, line 4, please delete "*ob*" and substitute --*OB*-- therefor.

At page 103, line 8, please delete "*ob*" and substitute --*OB*-- therefor.

At page 103, line 9, please delete "*ob*" and substitute --*OB*-- therefor.

At page 103, line 12, please delete "Tag)" and substitute --tag)-- therefor.

At page 103, line 13, please delete "(SEQ ID No:11). " and substitute --(SEQ ID NOS:11 and 12). -- therefor.

At page 103, line 15, please delete "NdeI" and substitute --*NdeI*-- therefor.

At page 103, line 19, please delete "(SEQ ID NO:12)" and substitute --(SEQ ID NO:13)-- therefor.

At page 103, line 21, please delete "(SEQ ID NO:13)" and substitute --(SEQ ID NO:14)-- therefor.

At page 103, line 23, please delete "(SEQ ID NO:14)" and substitute --(SEQ ID NO:15)-- therefor.

At page 103, line 25, please delete "(SEQ ID NO:15)" and substitute --(SEQ ID NO:16)-- therefor.

At page 103, line 26, please delete "NdeI" and substitute --*NdeI*-- therefor.

At page 104, line 1, please delete "NdeI" and substitute --*NdeI*-- therefor.

At page 104, line 5, please delete "encodes" and substitute --encode-- therefor.

At page 104, line 6, please delete "*ob*" and substitute --*OB*-- therefor.

At page 104, line 7, please delete "Hig-Tag" and substitute --His-tag-- therefor.

At page 104, line 9, please delete "*ob*" and substitute --*OB*-- therefor.

At page 104, line 14, please delete "the *ob* fusion. The majority of the *ob* fusion" and substitute --the *OB* fusion. The majority of the *OB* fusion-- therefor.

At page 104, line 17, please delete "*ob*" and substitute --*OB*-- therefor.

At page 104, line 18, please delete "*ob*" and substitute --*OB*-- therefor.

At page 104, line 19, please delete "imidazol" and substitute --imidazole-- therefor.

At page 104, line 20, please delete "imidazol" and substitute --imidazole-- therefor.

At page 104, line 20, please delete "form" and substitute --from-- therefor.

At page 104, line 21, please delete "imidazol" and substitute --imidazole-- therefor.

At page 104, line 21, please delete "*ob*" and substitute --*OB*-- therefor.

At page 104, line 23, please delete "preparation and used" and substitute --preparation, then used-- therefor.

At page 104, line 25, please delete "was" and substitute --were-- therefor.

At page 104, line 26, please delete "in 1 M guanidine solution, followed by dilution with" and substitute --in a 1 M guanidine solution, followed by dilution with a-- therefor.

At page 104, line 27, please delete "His-Tag" and substitute --His-tag-- therefor.

At page 104, line 28, please delete "before biological function assay." and substitute --before assaying for biological function.-- therefor.

At page 105, line 1, please delete "ob" and substitute --OB-- therefor.

At page 105, line 1, please delete "coding sequence" and substitute --coding sequences-- therefor.

At page 105, line 2, please delete "is being" and substitute --are each being-- therefor.

At page 105, line 3, please delete "ob" and substitute --OB-- therefor.

At page 105, line 4, please delete "ob" and substitute --OB-- therefor.

At page 105, line 6, please delete "such process" and substitute --such a process-- therefor.

At page 105, line 7, please delete "ob" and substitute --OB-- therefor.

At page 105, line 9, please delete "ob" and substitute --OB-- therefor.

At page 105, line 24, please delete "ob" and substitute --OB-- therefor.

At page 106, line 3, please delete "sp6" and substitute --Sp6-- therefor.

At page 106, line 7, please delete "5 fold" and substitute --5-fold-- therefor.

At page 106, line 8, please delete "ob" and substitute --OB-- therefor.

At page 106, line 13, please delete "ob" and substitute --OB-- therefor.

At page 106, line 18, please delete "ob" and substitute --OB-- therefor.

At page 106, line 21-22, please delete "(Shen and Rutter, 1984, Science 224:168-171)." and substitute --[Shen *et al.*, *Science*, 224:168-171 (1984)].-- therefor.

At page 106, line 23, please delete "ob" and substitute --OB-- therefor.

At page 106, line 24, please delete "*ob*" and substitute --*OB*-- therefor.

At page 106, line 25, please delete "*ob*" and substitute --*OB*-- therefor.

At page 106, line 25, please delete "(Figure 20A)" and substitute --(Figure 20A through C)-- therefor.

At page 106, line 26, please delete "ID NO: )." and substitute --ID NOS:22 and 24).-- therefor.

At page 107, line 1, please delete "coding exon." and substitute --coding exons.-- therefor.

At page 107, line 1, please delete "kB" and substitute --kb-- therefor.

At page 107, line 2, please delete "SEQ ID NO:22). " and substitute --SEQ ID NOS:22 and 24). -- therefor.

At page 107, line 4, please delete "*ob*" and substitute --*OB*-- therefor.

At page 107, line 5, please delete "3 exons" and substitute --three exons-- therefor.

At page 107, line 6, please delete "(Figure 20B)." and substitute --(Figure 20D).-- therefor.

At page 107, line 6, please delete "*ob*" and substitute --*OB*-- therefor.

At page 107, line 7, please delete "(Figure 20C)." and substitute --(Figure 20E).-- therefor.

At page 107, line 9, please delete "(Figure 20A)." and substitute --(Figure 20A through C).-- therefor.

At page 107, line 11, please delete "(SEQ ID NO:26)" and substitute --(SEQ ID NO:29)-- therefor.

At page 107, line 12, please delete "(SEQ ID NO:27)" and substitute --(SEQ ID NO:30)-- therefor.

At page 107, line 13, please delete "(SEQ ID NO:28)" and substitute --(SEQ ID NO:31)-- therefor.

At page 107, line 14, please delete "(SEQ ID NO:29)" and substitute --(SEQ ID NO:32)-- therefor.

At page 107, line 19, please delete "(abi," and substitute --(ABI,-- therefor.



At page 107, line 21, please delete "is on the" and substitute --is in the-- therefor.

At page 107, line 24, please delete "method with" and substitute --method using-- therefor.

At page 108, line 1, please delete "ob" and substitute --OB-- therefor.

At page 108, line 2, please delete "ob" and substitute --OB-- therefor.

At page 108, line 3, please delete "ob" and substitute --OB-- therefor.

At page 108, line 7, please delete "ob" and substitute --OB-- therefor.

At page 108, line 8, please delete "ob" and substitute --OB-- therefor.

At page 108, line 12, please delete "ob" and substitute --OB-- therefor.

At page 108, line 15, please delete "ob" and substitute --OB-- therefor.

At page 108, line 15, please delete "and thus delivering" and substitute --and thus, delivering-- therefor.

At page 108, line 16, please delete "ob" and substitute --OB-- therefor.

At page 108, line 17, please delete "cystein" and substitute --cysteine-- therefor.

At page 108, line 19, please delete "bridges, and therefor" and substitute --bridges; and therefore-- therefor.

At page 108, line 19, please delete "ob" and substitute --OB-- therefor.

At page 108, line 27, please delete "than *S. cerevisiae*" and substitute --than in *S. cerevisiae*-- therefor.

At page 109, line 5, please delete "alpha-mating" and substitute -- $\alpha$ -mating-- therefor.

At page 109, line 7, please delete "HIS4" and substitute --HIS4-- therefor.

At page 109, line 10, please delete "was the following:" and substitute --was as follows-- therefor.

At page 109, line 10, please delete "ob" and substitute --OB-- therefor.

At page 109, line 11, please delete "contained at its 3' end sequence" and substitute --contains at its 3' end, sequence-- therefor.

At page 109, line 11, please delete "*ob*" and substitute --*OB*-- therefor.

At page 109, line 12, please delete "5' end a" and substitute --5' end, a-- therefor.

At page 109, line 13, please delete "alpha-mating" and substitute -- $\alpha$ -mating-- therefor.

At page 109, line 14, please delete "XhoI" and substitute --*XhoI*-- therefor.

At page 109, line 15, please delete "*ob*" and substitute --*OB*-- therefor.

At page 109, line 16, please delete "EcoRI" and substitute --*EcoRI*-- therefor.

At page 109, line 17, please delete "XhoI" and substitute --*XhoI*-- therefor.

At page 109, line 17, please delete "EcoRI" and substitute --*EcoRI*-- therefor.

At page 109, line 18, please delete "*ob*" and substitute --*OB*-- therefor.

At page 109, line 20, please delete "individual constructs" and substitute --constructs-- therefor.

At page 109, line 21, please delete "orientation and frame and" and substitute --orientation, and frame, and-- therefor.

At page 109, line 24, please delete "*ob*" and substitute --*OB*-- therefor.

At page 109, line 25, please delete "*ob*" and substitute --*OB*-- therefor.

At page 109, line 26, please delete "*ob*" and substitute --*OB*-- therefor.

At page 109, line 27, please delete "yeast but" and substitute --yeast, but-- therefor.

At page 109, line 29, please delete "media whereas" and substitute --media, whereas-- therefor.

At page 110, line 1, please delete "*ob*" and substitute --*OB*-- therefor.

At page 110, line 2, please delete "*ob*" and substitute --*OB*-- therefor.

At page 110, line 3, please delete "*ob*" and substitute --*OB*-- therefor.

At page 110, line 4, please delete "*ob*" and substitute --*OB*-- therefor.

At page 110, line 6, please delete "*ob*" and substitute --*OB*-- therefor.

At page 110, line 8, please delete "ob-His tag" and substitute --OB-His-tag-- therefor.

At page 110, line 9, please delete "ob" and substitute --OB-- therefor.

At page 110, line 10, please delete "His tag" and substitute --His-tag-- therefor.

At page 110, line 11, please delete "ob" and substitute --OB-- therefor.

At page 110, line 12, please delete "Mass spec" and substitute --Mass spec.-- therefor.

At page 110, line 14, please delete "ob" and substitute --OB-- therefor.

At page 110, line 15, please delete "a ob" and substitute --an OB-- therefor.

At page 110, line 18, please delete "three step" and substitute --three-step-- therefor.

At page 110, line 22, please delete "10 mg/L" and substitute --10 mg/l-- therefor.

At page 110, line 25, please delete "ob" and substitute --OB-- therefor.

At page 110, line 26, please delete "ob" and substitute --OB-- therefor.

At page 110, line 26, please delete "ob" and substitute --OB-- therefor.

At page 111, line 1, please delete "Ob" and substitute --OB-- therefor.

At page 111, line 4, please delete "10  $\mu$ l" and substitute --10 $\mu$ l-- therefor.

At page 111, line 5, please delete "mg/ml and" and substitute --mg/ml, and-- therefor.

At page 111, line 5, please delete "chloramphenicol" and substitute --chloramphenicol-- therefor.

At page 111, line 6, please delete "OB1 protein" and substitute --OB1 DNA-- therefor.

At page 111, line 12, please delete "25 ul" and substitute --25  $\mu$ l-- therefor.

At page 111, line 18, please delete "l flasks" and substitute --L flasks-- therefor.

At page 111, line 22, please delete "O6" and substitute --OB-- therefor.

At page 111, line 23, please delete "gm perlit" and substitute --gram/liter --therefor.

At page 112, line 2, please delete "rmpm, 30" and substitute --rpm for 30--therefor.

At page 112, line 3, please delete "added to it to a final" and substitute --was added to a final-- therefor.

At page 112, line 5, please delete "pallet" and substitute --pellet-- therefor.

At page 112, line 6, please delete "GdHCl" and substitute --guanidine-HCl (GdHCl)-- therefor.

At page 112, line 10, please delete "sepharose column charged" and substitute --sepharose charged-- therefor.

At page 112, line 11, please delete "NiSo<sub>4</sub>" and substitute --NiSo<sub>4</sub>-- therefor.

At page 112, line 13, please delete "Finally the" and substitute --Finally, the--therefor.

At page 112, line 21, please delete "4 l" and substitute --4 L-- therefor.

At page 112, line 21, please delete "CaCl<sub>2</sub>" and substitute --CaCl<sub>2</sub>-- therefor.

At page 112, line 24, please delete "was added and" and substitute --was added, and-- therefor.

At page 112, line 26, please delete "histidine tag" and substitute --histidine-tag--therefor.

At page 113, line 4, please delete "20 %" and substitute --20%-- therefor.

At page 113, line 8, please delete "on superdex" and substitute --on a sephadex--therefor.

At page 113, line 10, please delete "Once purified the" and substitute --Once purified, the-- therefor.

At page 113, line 13, please delete "ob" and substitute --OB-- therefor.

At page 113, line 14, please delete "ob" and substitute --OB-- therefor.

At page 113, line 22, please delete "ob" and substitute --OB-- therefor.

At page 113, line 23, please delete " $\alpha$ -helix" and substitute -- $\alpha$ -helical-- therefor.

At page 113, line 23, please delete "ob" and substitute --OB-- therefor.

At page 114, line 1-3, please delete "(see Cohen et al., 1995, "Probing the Solution Structure of the DNA-Binding Protein Mass by a Combination of Proteolysis and Mass Spectrometry," and substitute --(Cohen *et al.*, 1995, *supra*)-- therefor.

At page 114, line 4, please delete "of ob" and substitute --of the OB-- therefor.

At page 114, line 11, please delete "period and effects" and substitute --period; and effects-- therefor.

At page 114, line 13, please delete "ob" and substitute --OB-- therefor.

At page 114, line 14, please delete "ob" and substitute --OB-- therefor.

At page 114, line 15, please delete "ob" and substitute --OB-- therefor.

At page 114, line 19, please delete "ob" and substitute --OB-- therefor.

At page 114, line 20, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 114, line 21, please delete "db/db" and substitute --db/db-- therefor.

At page 114, line 21, please delete "fa/fa" and substitute --fa/fa-- therefor.

At page 114, line 22, please delete "these" and substitute --db/db and fa/fa-- therefor.

At page 114, line 23, please delete "ob." and substitute --OB.-- therefor.

At page 114, line 23, please delete "the ob" and substitute --the OB-- therefor.

At page 114, line 24, please delete "ob" and substitute --OB-- therefor.

At page 114, line 25, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 114, line 26, please delete "wild type" and substitute --wild-type-- therefor.

At page 114, line 26, please delete "db/db" and substitute --db/db-- therefor.

At page 114, line 27, please delete "ob" and substitute --OB-- therefor.

At page 115, line 2, please delete "Freunds" and substitute --Freund's-- therefor.

At page 115, line 3, please delete "Inc)" and substitute --Inc.)-- therefor.

At page 115, line 3, please delete "ob" and substitute --OB-- therefor.

At page 115, line 5, please delete "[Harlow, 1988 #444]." and substitute --[Harlow *et al.*, *Antibodies: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY (1988)].-- therefor.

At page 115, line 10, please delete "affinity purified" and substitute --affinity-purified-- therefor.

At page 115, line 11, please delete "One half" and substitute --One-half-- therefor.

At page 115, line 16, please delete "run on 15%" and substitute --run on a 15%-- therefor.

At page 115, line 20, please delete "ob" and substitute --OB-- therefor.

At page 115, line 21, please delete "ob" and substitute --OB-- therefor.

At page 115, line 21, please delete "was added" and substitute --were added-- therefor.

At page 115, line 22, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 115, line 24, please delete "Sodium Phosphate" and substitute --sodium phosphate-- therefor.

At page 115, line 27, please delete "amino terminus" and substitute --amino-terminus-- therefor.

At page 115, line 28, please delete "HRP-Streptavidin as a secondary antibody followed" and substitute --HRP-streptavidin as a secondary antibody, followed-- therefor.

At page 116, line 3, please delete "b-Mercaptoethanol" and substitute -- $\beta$ -mercaptoethanol-- therefor.

At page 116, line 4, please delete "homogenization and" and substitute --homogenization, and-- therefor.

At page 116, line 7, please delete "ob" and substitute --OB-- therefor.

At page 116, line 8, please delete "ob" and substitute --OB-- therefor.

At page 116, line 14, please delete "ob" and substitute --OB-- therefor.

At page 116, line 14, please delete "in 100 ml" and substitute --in a 100 ml-- therefor.

At page 116, line 17, please delete "gelatine" and substitute --gelatin-- therefor.

At page 116, line 18, please delete "Horse Radish Peroxidase (HRP)-Streptavidin" and substitute --horseradish peroxidase (HRP)-streptavidin-- therefor.

At page 116, line 21, please delete "OD" and substitute --O.D.-- therefor.

At page 116, line 22, please delete "*ob*" and substitute --*OB*-- therefor.

At page 116, line 23, please delete "*ob*" and substitute --*OB*-- therefor.

At page 116, line 26, please delete "(SEQ ID NO: )" and substitute --(SEQ ID NO:34 )-- therefor.

At page 116, line 28, please delete "(SEQ ID NO: )" and substitute --(SEQ ID NO:35)-- therefor.

At page 117, line 2, please delete "(SEQ ID NO: )" and substitute --(SEQ ID NO:36)-- therefor.

At page 117, line 4, please delete "(SEQ ID NO: )" and substitute --(SEQ ID NO:37)-- therefor.

At page 117, line 6, please delete "alpha-mating" and substitute -- $\alpha$ -mating-- therefor.

At page 117, line 9, please delete "*ob*" and substitute --*OB*-- therefor.

At page 117, line 10, please delete "site before" and substitute --site, before-- therefor.

At page 117, line 11, please delete "end which" and substitute --end, which-- therefor.

At page 117, line 12, please delete "*ob*" and substitute --*OB*-- therefor.

At page 117, line 17, please delete "vector pPIC.9." and substitute --vector, pPIC.9.-- therefor.

At page 117, line 19, please delete "Pichia pastoris (His-) " and substitute --*Pichia pastoris* (His) -- therefor.

At page 117, line 20, please delete "clones of mouse and human were" and

substitute --mouse and human clones were-- therefor.

At page 117, line 21, please delete "assay and the" and substitute --assay. The-- therefor.

At page 117, line 22, please delete "*ob* expression initially" and substitute --OB expression, initially-- therefor.

At page 117, line 24, please delete "ob" and substitute --OB-- therefor.

At page 117, line 25, please delete "ob" and substitute --OB-- therefor.

At page 117, line 28, please delete "Beavis, 1990 #804." and substitute --in Beavis *et al.*, *Proc. Natl. Acad. Sci. USA*, **87**:6873-6877 (1990).-- therefor.

At page 118, line 1, please delete at first instance of "*ob*" and substitute --OB-- therefor.

At page 118, line 1, please delete at second instance of "*ob*" and substitute --OB-- therefor.

At page 118, line 2, please delete "Pet15b" and substitute --pET-15b-- therefor.

At page 118, line 4, please delete "Studier, 1990 #803." and substitute --[Studier *et al.*, *Meth. Enzymology*, **185**:80-89 (1990)].-- therefor.

At page 118, line 5, please delete "isopropyl-b-D-thiogalacto-pyranoside" and substitute --isopropyl- $\beta$ -D-thiogalacto-pyranoside-- therefor.

At page 118, line 10, please delete "ob" and substitute --OB-- therefor.

At page 118, line 12, please delete "ob" and substitute --OB-- therefor.

At page 118, line 17, please delete "hexahistidine" and substitute --hexa-histidine-- therefor.

At page 118, line 25-26, please delete "Ellman, 1959, *Arch. Biochem. Biophys.* **82**:70-77)." and substitute --in Ellman, *Arch. Biochem. Biophys.*, **82**:70-77 (1959).-- therefor.

At page 119, line 2, please delete "5 %" and substitute --5%-- therefor.

At page 119, line 7, please delete "that two" and substitute --that the two-- therefor.

At page 119, line 7, please delete "state to form" and substitute --state forming-- therefor.



At page 119, line 14, please delete "water which" and substitute --water, which-- therefor.

At page 119, line 16, please delete "dishes which were" and substitute --dishes, which were-- therefor.

At page 119, line 22, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 119, line 23, please delete "db/db" and substitute --*db/db*-- therefor.

At page 119, line 26, please delete "300 ml" and substitute --300  $\mu$ l-- therefor.

At page 120, line 6, please delete "ob" and substitute --OB-- therefor.

At page 120, line 6, please delete "Recombinant mouse" and substitute --¶  
Recombinant mouse-- therefor.

At page 120, line 7, please delete "ob" and substitute --OB-- therefor.

At page 120, line 7, please delete "PET 15b" and substitute --pET-15b-- therefor.

At page 120, line 8, please delete "Pichia pastoris" and substitute --*Pichia pastoris*-- therefor.

At page 120, line 10, please delete "carboxy terminal" and substitute --carboxy-terminal-- therefor.

At page 120, line 15, please delete "ob" and substitute --OB-- therefor.

At page 120, line 17, please delete "ob" and substitute --OB-- therefor.

At page 120, line 18, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 120, line 22, please delete "db/db" and substitute --*db/db*-- therefor.

At page 120, line 24, please delete "wild type" and substitute --wild-type-- therefor.

At page 120, line 24, please delete "ob" and substitute --OB-- therefor.

At page 120, line 26-27, please delete "(Bahary et al., 1990, Proc. Nat. Acad. Sci. USA. 87:8642-8646)." and substitute --(Bahary *et al.*, 1990, *supra*).-- therefor.

At page 120, line 27, please delete "fatty" and substitute --*Fatty*-- therefor.

At page 120, line 28, please delete "(Truett et al., 1991, Proc. Natl." and substitute --(Truett *et al.*, 1991, *supra*).-- therefor.

At page 121, line 1, please delete "Acad. Sci. USA. 88:7806-7809).".

At page 121, line 1, please delete "ob" and substitute --OB-- therefor.

At page 121, line 2, please delete "to ob serum" and substitute --to serum-- therefor.

At page 121, line 6, please delete "ob" and substitute --OB-- therefor.

At page 121, line 6, please delete "wild type" and substitute --wild-type-- therefor.

At page 121, line 9, please delete "ob" and substitute --OB-- therefor.

At page 121, line 10, please delete "db/db" and substitute --*db/db*-- therefor.

At page 121, line 16, please delete "electrophrotic" and substitute --electrophoretic-- therefor.

At page 121, line 19, please delete "HP6 with" and substitute --HP6, with-- therefor.

At page 121, line 23, please delete "ob" and substitute --OB-- therefor.

At page 121, line 25, please delete "ob" and substitute --OB-- therefor.

At page 121, line 25, please delete "HP 6" and substitute --HP6-- therefor.

At page 121, line 26, please delete " $\geq$  or 15 ng/ml" and substitute -- $\geq$  15 ng/ml-- therefor.

At page 122, line 4, please delete "anti-ob" and substitute --anti-OB-- therefor.

At page 122, line 6, please delete "ob" and substitute --OB-- therefor.

At page 122, line 9, please delete "*of the ob Protein*. Since the ob" and substitute --*of the OB Protein*. ¶ Since the OB-- therefor.

At page 122, line 12, please delete "ob" and substitute --OB-- therefor.

At page 122, line 17, please delete "ob" and substitute --OB-- therefor.

At page 122, line 19, please delete "ob" and substitute --OB-- therefor.

At page 122, line 22, please delete "(Abrams et al., 1992, Immunol. Rev. :5-24)." and substitute --[Abrams *et al.*, *Immunol. Rev.*, :5-24 (1992)].-- therefor.

At page 122, line 23, please delete "ob" and substitute --OB-- therefor.

At page 122, line 24, please delete "alpha mating" and substitute -- $\alpha$ -mating-- therefor.

At page 122, line 25, please delete "ob" and substitute --OB-- therefor.

At page 123, line 3, please delete "Pichia" and substitute --*Pichia*-- therefor.

At page 123, line 4, please delete "(Beavis, 1990 #804)." and substitute --(Beavis, 1990, *supra*).-- therefor.

At page 123, line 10, please delete "carboxyterminal" and substitute --carboxy-terminal-- therefor.

At page 123, line 11, please delete "*Protein*. Mouse ob" and substitute --*Protein*. ¶ Mouse OB-- therefor.

At page 123, line 12, please delete "PET 15b" and substitute --pET-15b-- therefor.

At page 123, line 18, please delete "ob" and substitute --OB-- therefor.

At page 123, line 19, please delete "(Gly-Ser-His-Met)" and substitute --(Gly-Ser-His-Met; SEQ ID NO:38)-- therefor.

At page 123, line 26, please delete "ob" and substitute --OB-- therefor.

At page 124, line 2, please delete "ob" and substitute --OB-- therefor.

At page 124, line 5, please delete "45 mg/l" and substitute --45 mg/L-- therefor.

At page 124, line 6, please delete "*ob*" and substitute --OB-- therefor.

At page 124, line 7-8, please delete "(Ellman, 1959, Arch. Biochem. Biophy. 82:70-77)." and substitute --(Ellman, 1959, *supra*).-- therefor.

At page 124, line 13, please delete "*ob Protein*. The purified" and substitute --OB Protein. ¶ The purified-- therefor.

At page 124, line 13, please delete "*ob*" and substitute --OB-- therefor.

At page 124, line 15, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 124, line 15, please delete "db/db" and substitute --*db/db*-- therefor.

At page 124, line 23, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 124, line 25, please delete "fifth day when" and substitute --fifth day, when-- therefor.

At page 124, line 28, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 125, line 11, please delete "wild type" and substitute --wild-type-- therefor.

At page 125, line 17, please delete "by protein treatment" and substitute --in protein treated animals-- therefor.

At page 125, line 20, please delete "db/db" and substitute --*db/db*-- therefor.

At page 125, line 21, please delete "(Figure 28A-F, Table 1)." and substitute --(Figure 28A through F, Table 1).-- therefor.

At page 125, line 21, please delete "db/db" and substitute --*db/db*-- therefor.

At page 125, line 26, please delete "wild type" and substitute --wild-type-- therefor.

At page 125, line 27, please delete "(Figure 28A-F, Table 1)." and substitute --(Figure 28A through F, Table 1).-- therefor.

At page 125, line 28, please delete "average of .5 grams" and substitute --average of 0.5 grams-- therefor.

At page 125, line 29, please delete "gained .4 grams" and substitute --gained 0.4 grams-- therefor.

At page 125, line 29, please delete "time points the" and substitute --time points, the-- therefor.

At page 126, line 5, please delete "wild type" and substitute --wild-type-- therefor.

At page 126, line 4 of Table 1, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 126, line 10 of Table 1, please delete "db/db" and substitute --*db/db*-- therefor.

At page 126, line 4 (post Table 1), please delete "*ob*" and substitute --*OB*-- therefor.

At page 126, line 5 (post Table 1), please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 126, line 6 (post Table 1), please delete "(Coleman, 1978, Diabetologia

14:141-148)." and substitute --(Coleman *et al.*, 1978, *supra*).-- therefor.

At page 127, line 1, please delete "ob" and substitute --OB-- therefor.

At page 127, line 3, please delete "ob" and substitute --OB-- therefor.

At page 127, line 4-5, please delete "carboxy terminal" and substitute --carboxy-terminal-- therefor.

At page 127, line 5, please delete "ob" and substitute --OB-- therefor.

At page 127, line 6, please delete "Pichia" and substitute --*Pichia*-- therefor.

At page 127, line 7-8, please delete "(Cregg *et al.*, 1993, *Bio/Technology* 11:905-914)." and substitute --[Cregg *et al.*, *Bio/Technology*, 11:905-914 (1993)].-- therefor.

At page 127, line 8, please delete "ob" and substitute --OB-- therefor.

At page 127, line 10, please delete "ob" and substitute --OB-- therefor.

At page 127, line 12, please delete "ob" and substitute --OB-- therefor.

At page 127, line 15, please delete "ob" and substitute --OB-- therefor.

At page 127, line 17-18, please delete "Pichia pastoris" and substitute --*Pichia pastoris*-- therefor.

At page 127, line 20, please delete "ob" and substitute --OB-- therefor.

At page 127, line 21, please delete "ob" and substitute --OB-- therefor.

At page 127, line 22, please delete "yeast shows that" and substitute --yeast showing that-- therefor.

At page 127, line 23, please delete "relative to human." and substitute --relative to the human protein.-- therefor.

At page 127, line 26, please delete "ob" and substitute --OB-- therefor.

At page 127, line 29, please delete "40 %" and substitute --40%-- therefor.

At page 128, line 3, please delete "protein lost" and substitute --protein, lost-- therefor.

At page 128, line 4, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 128, line 5, please delete "wild type" and substitute --wild-type-- therefor.

At page 128, line 5, please delete "ob" and substitute --OB-- therefor.

At page 128, line 6, please delete "ob" and substitute --OB-- therefor.

At page 128, line 10, please delete "half life" and substitute --half-life-- therefor.

At page 128, line 10-11, please delete "(Goodman, 1990, The Pharmacological Basis of Therapeutics, A. Gilman, ed., Pergamon Press: New York, pp. 19-45)." and substitute --[*The Pharmacological Basis of Therapeutics*, pp. 19-45, Goodman and Gilman, eds., Pergamon Press, New York, (1990)].-- therefor.

At page 128, line 12-13, please delete "(Coleman, 1978, *Diabetologia* 14:141-148; Weigle, 1988, *Int. J. Obesity* 12:567-578)." and substitute --[Coleman *et al.*, 1978, *supra*; Weigle, *Int. J. Obesity*, 12:567-578 (1988)].-- therefor.

At page 128, line 15, please delete "wild type" and substitute --wild-type-- therefor.

At page 128, line 17, please delete "wild type" and substitute --wild-type-- therefor.

At page 128, line 18, please delete "the data had greatly" and substitute --the data greatly-- therefor.

At page 128, line 23, please delete "wild type" and substitute --wild-type-- therefor.

At page 128, line 25-29, please delete "(Coleman, 1978, *Diabetologia* 14:141-148; Harris *et al.*, 1987, *Int. J. Obes.* 11:275-283; Harris and Martin, 1989, "Physiological and metabolic changes in parabiotic partners of obese rats", Hormones, Thermogenesis and Obesity, H. Lardy and F. Straatman, eds., Elsevier Science Publishing Co.: New York; Hervey, 1959, *J. Physiol.* 145:336-352)." and substitute --[Coleman *et al.*, 1978, *supra*; Harris *et al.*, 1987, *supra*; Harris *et al.*, "Physiological and metabolic changes in parabiotic partners of obese rats", in *Hormones, Thermogenesis and Obesity*, Lardy and Straatman, eds., Elsevier Science Publishing Co., New York (1989); Hervey, *J. Physiol.*, 145:336-352 (1959)].-- therefor.

At page 128, line 29, please delete "wild type" and substitute --wild-type-- therefor.

At page 128, line 30, please delete "ob" and substitute --OB-- therefor.

At page 128, line 31, please delete "ob" and substitute --OB-- therefor.

At page 129, line 1, please delete "wild type" and substitute --wild-type-- therefor.

At page 129, line 1, please delete "ob" and substitute --OB-- therefor.

At page 129, line 5, please delete "ob" and substitute --OB-- therefor.

At page 129, line 7, please delete "ob" and substitute --OB-- therefor.

At page 129, line 8, please delete "wild type" and substitute --wild-type-- therefor.

At page 129, line 10, please delete "wild type" and substitute --wild-type-- therefor.

At page 129, line 15, please delete "db/db" and substitute --*db/db*-- therefor.

At page 129, line 17, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 129, line 17, please delete "(Coleman, 1978, Diabetologia 14:141-148)." and substitute --(Coleman *et al.*, 1978, *supra*).-- therefor.

At page 129, line 17, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 129, line 19-20, please delete "(C57B16J vs. C57B1/Ks)" and substitute --(C57B16J vs. C57B1/Ks)-- therefor.

At page 129, line 20, please delete "(Coleman, 1978, Diabetologia 14:141-148)." and substitute --(Coleman *et al.*, 1978, *supra*).-- therefor.

At page 129, line 24, please delete "ob" and substitute --OB-- therefor.

At page 129, line 24, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 129, line 27, please delete "ob" and substitute --OB-- therefor.

At page 129, line 28, please delete "ob" and substitute --OB-- therefor.

At page 129, line 29, please delete "ob" and substitute --OB-- therefor.

At page 129, line 30, please delete "dband" and substitute --*db* and-- therefor.

At page 130, line 1-3, please delete "(Truett et al., 1991, Proc. Natl. Acad. Sci. USA. 88:7806-7809; Coleman, 1978, Diabetologia 14:141-148; Hervey, 1959, J. Physiol. 145:336-352)." and substitute --(Truett *et al.*, 1991, *supra*; Coleman, 1978, *supra*; Hervey, 1959, *supra*).-- therefor.

At page 130, line 4, please delete "ob" and substitute --OB-- therefor.

At page 130, line 5, please delete "ob" and substitute --OB-- therefor.

At page 130, line 8, please delete "ob" and substitute --OB-- therefor.

At page 130, line 10, please delete "ob" and substitute --OB-- therefor.

At page 130, line 11, please delete "i.e.;" and substitute --i.e.,-- therefor.

At page 130, line 12, please delete "ob" and substitute --OB-- therefor.

At page 130, line 14, please delete "ob" and substitute --OB-- therefor.

At page 130, line 17, please delete "ob" and substitute --OB-- therefor.

At page 130, line 20-23, please delete "(Leibel et al., 1995, N. Engl. J. Med. 332:621-628; Keesey and Corbett, 1984, "Metabolic defense of the body weight set-point", Association for Research in Nervous and Mental Disease, Stunkard and Stellar, eds., Raven Press: New York. p. 87-96)." and substitute --[Leibel *et al.*, N. Engl. J. Med., 332:621-628 (1995); Keesey *et al.*, in *Association for Research in Nervous and Mental Disease*, pp. 87-96, Stunkard and Stellar, eds., Raven Press, New York (1984)].-- therefor.

At page 130, line 24, please delete "ob" and substitute --OB-- therefor.

At page 130, line 26, please delete "ob" and substitute --OB-- therefor.

At page 131, line 1, please delete "(ob)" and substitute --(OB)-- therefor.

At page 131, line 2, please delete "ob" and substitute --OB-- therefor.

At page 131, line 3, please delete "in vivo" and substitute --in vivo-- therefor.

At page 131, line 6, please delete "ob" and substitute --OB-- therefor.

At page 131, line 8, please delete "ob" and substitute --OB-- therefor.

At page 131, line 10, please delete "ob" and substitute --OB-- therefor.

At page 131, line 10, please delete "db/db" and substitute --db/db-- therefor.

At page 131, line 11, please delete "ob" and substitute --OB-- therefor.

At page 131, line 12, please delete "ob" and substitute --OB-- therefor.

At page 131, line 13, please delete "body weight as are" and substitute --body weight, as are-- therefor.

At page 131, line 14, please delete "ob" and substitute --OB-- therefor.

At page 131, line 17, please delete "In Situ *Hybridization*. White" and substitute --



*In Situ Hybridization.* ¶ White-- therefor.

At page 131, line 19, please delete "ethod" and substitute --method-- therefor.

At page 131, line 19-20, please delete "Richardson et al. (1992, Growth, Development & Aging 56:149-157)." and substitute --Richardson *et al.*, *Growth, Development & Aging*, 56:149-157 (1992).-- therefor.

At page 131, line 23, please delete "(1h)" and substitute --(1 hr.)-- therefor.

At page 131, line 23, please delete "(2h)" and substitute --(2 hr.)-- therefor.

At page 131, line 24, please delete "db/db" and substitute --*db/db*-- therefor.

At page 131, line 24, please delete "on to the" and substitute --by the-- therefor.

At page 131, line 25, please delete "1h" and substitute --1 hr.-- therefor.

At page 131, line 26, please delete "for 3 min." and substitute --for three min.-- therefor.

At page 131, line 26, please delete "temperature. Antisense" and substitute --temperature. An antisense-- therefor.

At page 131, line 27, please delete at first instance of "*ob*" and substitute --*OB*-- therefor.

At page 131, line 27, please delete at second instance of "*ob*" and substitute --*OB*-- therefor.

At page 131, line 28, please delete "In site" and substitute --*In situ*-- therefor.

At page 131, line 30, please delete "Schaeren-Wiemers and Gerfin- Moser (Schaeren-Wiemers and Gerfin-Moser, 1993, Histochemistry 100:431-440)." and substitute --Schaeren-Wiemers *et al.*, *Histochemistry*, 100:431-440 (1993).-- therefor.

At page 132, line 1, please delete "Culture. Total RNA and" and substitute --*Culture.* ¶ Total RNA and-- therefor.

At page 132, line 3, please delete "Rodbell and RNA" and substitute --Rodbell, and RNA-- therefor.

At page 132, line 3-4, please delete "Dani et al. (Dani et al., 1989, Mol. Cell. Endocrinol. 63:199-208; Rodbell, J. Biol. Chem. 239:375-380)" and substitute --Dani *et al.*, *Mol. Cell. Endocrinol.*, 63:199-208 (1989); Rodbell, *J. Biol. Chem.* 239:375-380 (1989).-- therefor.

At page 132, line 7-9, please delete "(Dani et al., 1989, "Molecular biology techniques in the study of adipocyte differentiation", Obesity in Europe vol 88, Bjorntorp and Rossner, Eds., John Libbey Company Ltd.: London, England. p. 371-376)." and substitute --[Dani *et al.*, "Molecular biology techniques in the study of adipocyte differentiation", in *Obesity in Europe* vol 88, pp. 371-376, Bjorntorp and Rossner, Eds., John Libbey Company Ltd., London, England (1989)].-- therefor.

At page 132, line 13, please delete "*Treatment*. Two month old" and substitute --*Treatment*. ¶ Two month old-- therefor.

At page 132, line 13, please delete "Two" and substitute --One-- therefor.

At page 132, line 14, please delete "(Sigma A0632)" and substitute --(Sigma catalog no. A0632)-- therefor.

At page 132, line 15, please delete "0.2" and substitute --2.0-- therefor.

At page 132, line 17, please delete "more that twenty" and substitute --more than twenty-- therefor.

At page 132, line 18, please delete "post GTG" and substitute --post-GTG-- therefor.

At page 132, line 21, please delete "*ob*" and substitute --*OB*-- therefor.

At page 132, line 21-22, please delete "(Zhang et al., 1994, Nature 372:425-432)." and substitute --[Zhang *et al.*, *Nature*, 372:425-432 (1994)].-- therefor.

At page 132, line 25, please delete "*ob*" and substitute --*OB*-- therefor.

At page 132, line 25-28, please delete "(Richardson et al., 1992, Growth, Development & Aging 56:149-157; Wasserman, 1964, "The concept of the fat organ: in Rodahl, Issekutz, fat as a tissue", Rodahl, Issekutz, Fat as a tissue, McGraw Hill: New York, p. 22-92)." and substitute --[Richardson *et al.*, 1992, *supra*; Wasserman, "The concept of the fat organ: in Rodahl, Issekutz, fat as a tissue", pp. 22-92, McGraw Hill, New York (1964)].-- therefor.

At page 133, line 1, please delete "db/db" and substitute --*db/db*-- therefor.

At page 133, line 2, please delete "*ob*" and substitute --*OB*-- therefor.

At page 133, line 3, please delete "*ob*" and substitute --*OB*-- therefor.

At page 133, line 3, please delete "db/db" and substitute --*db/db*-- therefor.

At page 133, line 5, please delete "*ob/ob*" and substitute --*ob/ob*-- therefor.

At page 133, line 5-6, please delete "(Bahary et al., 1990, Proc. Nat. Acad. Sci. USA 87:8642-8646)." and substitute --(Bahary *et al.*, 1990, *supra*).-- therefor.

At page 133, line 8, please delete "*ob*" and substitute --*OB*-- therefor.

At page 133, line 9, please delete "*ob*" and substitute --*OB*-- therefor.

At page 133, line 10, please delete "Northrn" and substitute --Northern-- therefor.

At page 133, line 11, please delete "*ob*" and substitute --*OB*-- therefor.

At page 133, line 15, please delete "cells as well as in" and substitute --cells, nor in-- therefor.

At page 133, line 16, please delete "cells which" and substitute --cells, which-- therefor.

At page 133, line 16, please delete "markers while" and substitute --markers, while-- therefor.

At page 133, line 17, please delete "*ob*" and substitute --*OB*-- therefor.

At page 133, line 18, please delete "(Dani et al., J. Biol. Chem. 264:10119-10125)." and substitute --[Dani *et al.*, *J. Biol. Chem.*, 264:10119-10125 (1989)].-- therefor.

At page 133, line 18, please delete "*ob*" and substitute --*OB*-- therefor.

At page 133, line 19, please delete "conditions as" and substitute --conditions, as-- therefor.

At page 133, line 19, please delete "in late" and substitute --in late,-- therefor.

At page 133, line 21, please delete "*ob*" and substitute --*OB*-- therefor.

At page 133, line 26, please delete at first instance of "*ob*" and substitute --*OB*-- therefor.

At page 133, line 26, please delete at second instance of "*ob*" and substitute --*OB*-- therefor.

At page 133, line 26, please delete "tissue although" and substitute --tissue, although-- therefor.

At page 133, line 27, please delete "50 fold" and substitute --50-fold-- therefor.

At page 133, line 28, please delete "correlated loosely" and substitute --correlate loosely-- therefor.

At page 133, line 30, please delete "(Johnson and Hirsch, 1972, J. Lipid Res. 13: 2-11)." and substitute --[Johnson *et al.*, *J. Lipid Res.*, 13:2-11 (1972)].-- therefor.

At page 133, line 30, please delete "*ob*" and substitute --*OB*-- therefor.

At page 134, line 2, please delete "*ob*" and substitute --*OB*-- therefor.

At page 134, line 2-3, please delete "(Jacobsson *et al.*, 1985, J. Biol. Chem. 260:16250-16254)." and substitute --[Jacobsson *et al.*, *J. Biol. Chem.*, 260:16250-16254 (1985)].-- therefor.

At page 134, line 4, please delete "*ob*" and substitute --*OB*-- therefor.

At page 134, line 8, please delete "*ob*" and substitute --*OB*-- therefor.

At page 134, line 8, please delete "db/db" and substitute --*db/db*-- therefor.

At page 134, line 10, please delete "ob/ob" and substitute --*ob/ob*-- therefor.

At page 134, line 10, please delete "db/db" and substitute --*db/db*-- therefor.

At page 134, line 10-11, please delete "(Bray and Campfield, 1975, Metabolism 24:99-117)." and substitute --[Bray *et al.*, *Metabolism*, 24:99-117 (1975)].-- therefor.

At page 134, line 12, please delete "blood borne" and substitute --blood-borne-- therefor.

At page 134, line 13, please delete "(Hervey, 1959, J. Physiol. 145:336-352)." and substitute --(Hervey, 1959, *supra*).-- therefor.

At page 134, line 15, please delete "suggesting the *ob*" and substitute --suggesting that the *OB*-- therefor.

At page 134, line 15-16, please delete "(Coleman *et al.*, 1978, Diabetologia 14:141-148)." and substitute --(Coleman *et al.*, 1978, *supra*).-- therefor.

At page 134, line 16, please delete "db" and substitute --*db*-- therefor.

At page 134, line 17, please delete "*ob*" and substitute --*OB*-- therefor.

At page 134, line 18, please delete "*ob*" and substitute --*OB*-- therefor.

At page 134, line 20-21, please delete "Gold ThioGlucose" and substitute --gold

thioglucose-- therefor.

At page 134, line 21, please delete "(Debons et al., 1977, Fed. Proc.36:143-147)."  
and substitute --[Debons *et al.*, *Fed. Proc.*, 36:143-147 (1977)].-- therefor.

At page 134, line 24, please delete "0.2" and substitute --2.0-- therefor.

At page 134, line 28, please delete "db/db" and substitute --*db/db*-- therefor.

At page 134, line 29, please delete "*ob*" and substitute --*OB*-- therefor.

At page 134, line 30, please delete "db/db" and substitute --*db/db*-- therefor.

At page 134, line 30, please delete "GTG treated" and substitute --GTG-treated--  
therefor.

At page 135, line 1, please delete "ThioGlucose" and substitute --Thioglucose--  
therefor.

At page 135, line 7, please delete "Two" and substitute --One-- therefor.

At page 135, line 7, please delete "goldthioglucose" and substitute --gold  
thioglucose-- therefor.

At page 135, line 8, please delete "Goldthioglucose" and substitute --Gold  
thioglucose-- therefor.

At page 135, line 12, please delete "in the Table" and substitute --in Table 2--  
therefor.

At page 135, line 16, please delete "*ob*" and substitute --*OB*-- therefor.

At page 135, line 18, please delete "*ob*" and substitute --*OB*-- therefor.

At page 135, line 22, please delete "*ob*" and substitute --*OB*-- therefor.

At page 135, line 24, please delete "*ob*" and substitute --*OB*-- therefor.

At page 135, line 24, please delete "the bodies lipid" and substitute --the body's  
lipid-- therefor.

At page 135, line 25, please delete "*ob*" and substitute --*OB*-- therefor.

At page 135, line 25, please delete "twenty fold" and substitute --twenty-fold--  
therefor.

At page 135, line 26, please delete "*ob*" and substitute --*OB*-- therefor.

At page 135, line 27, please delete "twenty fold" and substitute --twenty-fold-- therefor.

At page 135, line 28, please delete "five fold" and substitute --five-fold-- therefor.

At page 135, line 28-29, please delete "(Debons et al., 1977, Fed. Proc. 36:143-147)." and substitute --(Debons *et al.*, 1977, *supra*).-- therefor.

At page 135, line 30, please delete "*ob*" and substitute --*OB*-- therefor.

At page 135, line 31, please delete "*ob*" and substitute --*OB*-- therefor.

At page 136, line 1, please delete "(Coleman et al., 1978, Diabetologia 14:141-148)." and substitute --(Coleman *et al.*, 1978, *supra*).-- therefor.

At page 136, line 2, please delete "*ob*" and substitute --*OB*-- therefor.

At page 136, line 3, please delete "*ob*" and substitute --*OB*-- therefor.

At page 136, line 3, please delete "*db/db*" and substitute --*db/db*-- therefor.

At page 136, line 3, please delete "GTG treated" and substitute --GTG-treated-- therefor.

At page 136, line 4, please delete "*ob*" and substitute --*OB*-- therefor.

At page 136, line 4-5, please delete "(Ashwell et al., 1977, Proc. R. Soc. Lond. 195:343-353; Ashwell and Meade, Diabetologia 15:465-470)." and substitute --[Ashwell *et al.*, *Proc. R. Soc. Lond.*, 195:343-353 (1977); Ashwell *et al.*, *Diabetologia*, 15:465-470].- - therefor.

At page 136, line 7, please delete "wild type *ob*" and substitute --wild-type *OB*-- therefor.

At page 136, line 10, please delete "*ob*" and substitute --*OB*-- therefor.

At page 136, line 13, please delete "*ob*" and substitute --*OB*-- therefor.

At page 136, line 16, please delete "*ob*" and substitute --*OB*-- therefor.

At page 136, line 16-18, please delete "(Johnson and Gross, 1983, FASEB J. 7:678-686; Baura et al., 1993, Jr. Clin. Investigation, Inc. 92:1824-1830; Pardridge, 1986, Endocrine Reviews 7:314-330)." and substitute --[Johnson *et al.*, *FASEB J.*, 7:678-686 (1983); Baura *et al.*, *J. Clin. Invest.*, 92:1824-1830 (1993); Pardridge,

*Endocrine Reviews*, 7:314-330 (1986)].-- therefor.

At page 136, line 24, please delete "*ob*" and substitute --*OB*-- therefor.

At page 136, line 25, please delete "*db/db*" and substitute --*db/db*-- therefor.

At page 136, line 26-27, please delete "(Johnson and Hirsch, 1972, *J. Lipid Res.* 13: 2-11)." and substitute --(Johnson *et al.*, 1972, *supra*).-- therefor.

At page 136, line 29-30, please delete "(Faust *et al.*, 1978, *Am. J. Physiol.* 235:E279-86; Faust *et al.*, 1977, *Science* 197:393-396)." and substitute --[Faust *et al.*, *Am. J. Physiol.*, 235:279-286 (1978); Faust *et al.*, *Science*, 197:393-396 (1977)].-- therefor.

At page 136, line 30, please delete "*ob*" and substitute --*OB*-- therefor.

At page 137, line 1, please delete "parameter and merely" and substitute --parameter, but merely-- therefor.

At page 137, line 2, please delete "*ob*" and substitute --*OB*-- therefor.

At page 137, line 2, please delete "*db/db*" and substitute --*db/db*-- therefor.

At page 137, line 2-3, please delete "VMH lesioned" and substitute --VMH-lesioned-- therefor.

At page 137, line 4, please delete "*ob*" and substitute --*OB*-- therefor.

At page 137, line 6, please delete "*ob*" and substitute --*OB*-- therefor.

At page 137, line 6, please delete "body weight as" and substitute --body weight, as-- therefor.

At page 137, line 8, please delete "expression levels of the *ob*" and substitute --expression of the *OB*-- therefor.

At page 137, line 9, please delete "*ob*" and substitute --*OB*-- therefor.

At page 137, line 10, please delete "RNA and" and substitute --RNA, and-- therefor.

At page 137, line 10, please delete "*ob*" and substitute --*OB*-- therefor.

At page 137, line 11, please delete "*ob*" and substitute --*OB*-- therefor.

At page 137, line 12, please delete "adipocytes and" and substitute --adipocytes, and-- therefor.

At page 137, line 13, please delete "action will" and substitute --action, will-- therefor.

At page 137, line 20, please delete "ob" and substitute --OB-- therefor.

At page 137, line 20, please delete "tissue and" and substitute --tissue, and-- therefor.

At page 137, line 21, please delete "ob" and substitute --OB-- therefor.

At page 137, line 25, please delete at first instance of "ob" and substitute --OB-- therefor.

At page 137, line 25, please delete at second instance of "ob" and substitute --OB-- therefor.

At page 137, line 27, please delete "ob" and substitute --OB-- therefor.

At page 137, line 30, please delete "MaterialS and Methods" and substitute --Materials and Methods-- therefor.

At page 138, line 1, please delete "*Northern blot analysis*. Total RNA" and substitute --*Northern Blot Analysis*. ¶ Total RNA-- therefor.

At page 138, line 2, please delete "Chirgwin et al.(1979, *Biochem.* 18:5294-5299)." and substitute --Chirgwin *et al.*, *Biochem.*, 18:5294-5299 (1979).-- therefor.

At page 138, line 3, please delete "radiolabelling" and substitute --radiolabeling-- therefor.

At page 138, line 3-4, please delete "(Zhang et al., 1994, *Nature* 372:425-432)." and substitute --(Zhang *et al.*, 1994, *supra*).-- therefor.

At page 138, line 5, please delete "CLONTECH" and substitute --CLONETECH-- therefor.

At page 138, line 6, please delete "radiolabelled" and substitute --radiolabeled-- therefor.

At page 138, line 9, please delete "*development*. Sequence tagged" and substitute --*Development*. ¶ Sequence tagged-- therefor.

At page 138, line 10-15, please delete "(Green and Green, 1991, *PCR Methods Applic.* 1:77-90; Green et al., 1991, *Genomics* 11:548-564; Green,1993, "Physical mapping of human chromosomes: generation of chromosome-specific sequence-tagged



sites", *Methods in Molecular Genetics* Vol. 1: Gene and Chromosome Analysis (Part A). (ed. K.W. Adolph), Academic Press, Inc.: San Diego, pp. 192-210; Green et al., 1994, *Hum. Mol. Genet.* 3:489-501)." and substitute --[(Green *et al.*, *PCR Methods Applic.*, 1991; Green *et al.*, *Genomics*, 11:548-564 (1991); Green, "Physical mapping of human chromosomes: generation of chromosome-specific sequence-tagged sites", in *Methods in Molecular Genetics* Vol. 1, Gene and Chromosome Analysis (Part A), pp. 192-210, Adolph ed., Academic Press, Inc., San Diego (1993); Green *et al.*, *Hum. Mol. Genet.*, 3:489-501 (1994)].-- therefor.

At page 138, line 17, please delete "e.g.," and substitute --e.g.,-- therefor.

At page 138, line 21, please delete "(Table 4) or" and substitute --(Table 4), or-- therefor.

At page 138, line 22-23, please delete "(Hillier and Green, 1991, *PCR Methods Applic.* 1:124-128)" and substitute --[Hillier *et al.*, *PCR Methods Applic.*, 1:124-128 (1991)]-- therefor.

At page 138, line 24-25, please delete "GenBank. ¶ Table 3. STSs" and substitute --GenBank. Table 3 illustrates STSs-- therefor.

At page 138, line 25, please delete "ob" and substitute --OB-- therefor.

At page 138, line 28, please delete "ob" and substitute --OB-- therefor.

At page 138, line 33, please delete "see" and substitute --see-- therefor.

At page 140, in Table 3, line 1, please insert --\*-- immediately after "Primers".

At page 141, in Table 3, line 1, please insert --\*-- immediately after "Primers".

At page 141, please insert --\*The PCR Primers correspond consecutively, in seriatum, to SEQ ID NO: 39 through SEQ ID NO: 76.-- at the bottom of Table 3.

At page 142, line 1, please delete "Table 4. Microsatellite" and substitute --Table 4 illustrates Microsatellite-- therefor.

At page 142, line 1, please delete "ob" and substitute --OB-- therefor.

At page 142, line 2, please delete "8" and substitute --eight-- therefor.

At page 142, line 2, please delete "ob" and substitute --OB-- therefor.

At page 142, in Table 4, please insert --\*-- immediately after "Primers".

At page 142, please insert --\*The Primers correspond consecutively, in seriatum, to

SEQ ID NO: 77 through SEQ ID NO: 92.-- at the bottom of Table 4.

At page 142, line 2, (post-Table 4), please delete "*ob*-specific" and substitute --*OB*-specific--.

At page 142, line 3, please delete "PAX4" and substitute --*Pax4*-- therefor.

At page 142, line 6-7, please delete "(GGCTGTGTGAGCAAGATCCTAGGA and GGGAGCCTTGTCCTGGGTACAAAG" and substitute --(GGCTGTGTGAGCAAGATCCTAGGA) (SEQ ID NO:63) and (GGGAGCCTTGTCCTGGGTACAAAG) (SEQ ID NO:93)-- therefor.

At page 142, line 7-8 (post Table 4), please delete "(Walther et al., 1991, Genomics 11:424-434))" and substitute --[Walther *et al.*, *Genomics*, 11:424-434 (1991)]-- therefor.

At page 143, line 6, please delete "(TTGCCAGGCAAAGAGGGCTGGAC)" and substitute --(TTGCCAGGCAAAGAGGGCTGGAC) (SEQ ID NO:64)-- therefor.

At page 143, line 8, please delete "PAX4" and substitute --*Pax4*-- therefor.

At page 143, line 11, please delete "*screening*. Most" and substitute --*screening*. ¶ Most-- therefor.

At page 143, line 13-14, please delete "(Green et al., 1995, Genomics 25: 170-183)" and substitute --(Green *et al.*, 1995, *supra*)-- therefor.

At page 143, line 14-15, please delete "(Green et al., 1995, Genomics 25: 170-183; Greena and Olson, 1990, Proc. Natl. Acad. Sci. USA 87:1213-1217)." and substitute --[Green *et al.*, 1995, *supra*; Greena *et al.*, *Proc. Natl. Acad. Sci. USA*, 87:1213-1217 (1990)].-- therefor.

At page 143, line 17, please delete "(Greena and Olson, 1990, Proc. Natl. Acad. Sci. USA 87:1213-1217)" and substitute --(Greena *et al.*, 1990, *supra*)-- therefor.

At page 143, line 18-21, please delete "(Dausset et al., 1992, Behring Inst. Mitt. 91:13-20; Albertsen et al., 1990, Proc. Natl. Acad. Sci. USA 87:4256-4260) or ICI (Anand et al., 1989, Nucl. Acids Res. 17:3425-3433; Anand et al., 1990, Nucl. Acids Res. 18:1951-1956)" and substitute --[Dausset *et al.*, *Behring Inst. Mitt.*, 91:13-20 (1992); Albertsen *et al.*, *Proc. Natl. Acad. Sci. USA*, 87:4256-4260 (1990)] or ICI [Anand *et al.*, *Nucl. Acids Res.*, 17:3425-3433 (1989); Anand *et al.*, *Nucl. Acids Res.* 18:1951-1956 (1990)]-- therefor.

At page 143, line 25, please delete "*ob*" and substitute --*OB*-- therefor.

At page 143, line 25, please delete "northern" and substitute --Northern-- therefor.

At page 143, line 26, please delete "*ob*" and substitute --*OB*-- therefor.

At page 143, line 30, please delete "RNA as" and substitute --RNA, as-- therefor.

At page 144, line 1, please delete "*ob*" and substitute --*OB*-- therefor.

At page 144, line 2, please delete "*ob*" and substitute --*OB*-- therefor.

At page 144, line 4, please delete "*ob*" and substitute --*OB*-- therefor.

At page 144, line 6, please delete "*ob*" and substitute --*OB*-- therefor.

At page 144, line 7, please delete "northern" and substitute --Northern-- therefor.

At page 144, line 9, please delete "*ob*" and substitute --*OB*-- therefor.

At page 144, line 12, please delete "*ob*" and substitute --*OB*-- therefor.

At page 144, line 13, please delete "*ob*" and substitute --*OB*-- therefor.

At page 144, line 15, please delete "distal): *Met*" and substitute --distal): the *Met*-- therefor.

At page 144, line 16, please delete "*ob*" and substitute --*OB*-- therefor.

At page 144, line 17, please delete "carboxypeptidase" and substitute --*carboxypeptidase*-- therefor.

At page 144, line 17-18, please delete "(Zhang et al., 1994, Nature 372:425-432; Friedman et al., 1991, Genomics 11:1054-1062)." and substitute --(Zhang *et al.*, 1994, *supra*; Friedman *et al.*, 1991, *supra*).-- therefor.

At page 144, line 18, please delete "In mouse," and substitute --In the mouse,-- therefor.

At page 144, line 19, please delete "*ob*" and substitute --*OB*--.

At page 144, line 19-20, please delete "(Walther et al., 1991, Genomics 11:424-434;" and substitute --(Walther *et al.*, 1991, *supra*;-- therefor.

At page 144, line 20, please delete "*ob*" and substitute --*OB*-- therefor.

At page 144, line 21, please delete "1 megabase" and substitute --one megabase-- therefor.

At page 144, line 23, please delete "*ob*" and substitute --*OB*-- therefor.

At page 144, line 23, please delete "PAX4 and CPA" and substitute --*Pax4* and *CPA*-- therefor.

At page 144, line 24, please delete "(Heng et al., 1993, *Cell Genet.* 62:108-109)" and substitute --[Heng *et al.*, *Cell Genet.*, 62:108-109 (1993)]-- therefor.

At page 144, line 25, please delete "PAX4 (Tamura et al., 1994, *Cytogenet. Cell Genet.* 66:132-134)" and substitute --*Pax4* [Tamura *et al.*, *Cytogenet. Cell Genet.*, 66:132-134 (1994)]-- therefor.

At page 144, line 27, please delete "*ob*" and substitute --*OB*-- therefor.

At page 144, line 30, please delete "*ob*" and substitute --*OB*-- therefor.

At page 144, line 30, please delete "*chromosome 7. An STS*" and substitute --*chromosome 7. ¶ An STS*-- therefor.

At page 144, line 31, please delete "*ob*" and substitute --*OB*-- therefor.

At page 145, line 2, please delete "(Green et al., 1995a, *Genomics* 25: 170-183)" and substitute --(Green *et al.*, 1995, *supra*)-- therefor.

At page 145, line 5, please delete "*ob*" and substitute --*OB*-- therefor.

At page 145, line 5, please delete "2 additional" and substitute --two additional-- therefor.

At page 145, line 6, please delete "*ob*-specific" and substitute --*OB*-specific-- therefor.

At page 145, line 8, please delete "hybridization using" and substitute --hybridization, using-- therefor.

At page 145, line 8, please delete "*ob*" and substitute --*OB*-- therefor.

At page 145, line 9, please delete "was seen, and" and substitute --was seen; and-- therefor.

At page 145, line 11, please delete "*ob*" and substitute --*OB*-- therefor.

At page 145, line 14-15, please delete "(Green et al. 1991, *supra*; Green et al. 1994, *supra*; Green et al. 1995, *supra*)," and substitute --(Green *et al.* 1991, *supra*; Green *et al.* 1994, *supra*; Green *et al.* 1995, *supra*),-- therefor.

At page 145, line 16, please delete "*ob*" and substitute --*OB*-- therefor.

At page 145, line 19, please delete "*ob*-specific" and substitute --*OB*-specific-- therefor.

At page 145, line 20-21, please delete "PAX4 gene (Tamura et al. 1994, *supra*; Stapleton et al., 1993, *Nature Genet.* 3:292-298)," and substitute --*Pax4* [Tamura *et al.* 1994, *supra*; Stapleton *et al.*, *Nature Genet.*, 3:292-298 (1993)],-- therefor.

At page 145, line 26, please delete "i.e." and substitute --*i.e.*-- therefor.

At page 145, line 29, please delete "*ob*-containing" and substitute --*OB*-containing-- therefor.

At page 145, line 30, please delete "i.e." and substitute --*i.e.*-- therefor.

At page 145, line 31, please delete "while" and substitute --whereas-- therefor.

At page 145, line 31, please delete "i.e." and substitute --*i.e.*-- therefor.

At page 146, line 2, please delete "*Pax4*" and substitute --*Pax-4*-- therefor.

At page 146, line 2, please delete "*ob*" and substitute --*OB*-- therefor.

At page 146, line 3, please delete "(Zhang et al. 1994, *supra*)."

(Zhang *et al.* 1994, *supra*).-- therefor.

At page 146, line 3, please delete "*ob*" and substitute --*OB*-- therefor.

At page 146, line 4, please delete "*ob*-specific" and substitute --*OB*-specific-- therefor.

At page 146, line 13, please delete "*ob*" and substitute --*OB*-- therefor.

At page 146, line 15, please delete "*ob*-containing" and substitute --*OB*-containing-- therefor.

At page 146, line 15, please delete "PAX4" and substitute --*Pax4*-- therefor.

At page 146, line 16, please delete "*ob*" and substitute --*OB*-- therefor

At page 146, line 20, please delete "*ob*-specific" and substitute --*OB*-specific-- therefor.

At page 146, line 22, please delete "PAX4" and substitute --*Pax4*-- therefor.

At page 146, line 23, please delete "*ob*" and substitute --*OB*-- therefor.

At page 146, line 26, please delete "Ob" and substitute --OB-- therefor.

At page 146, line 28, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 146, line 29, please delete "ob" and substitute --OB-- therefor.

At page 146, line 30, please delete "ob" and substitute --OB-- therefor.

At page 146, line 31, please delete "ob" and substitute --OB-- therefor.

At page 147, line 1 of Table 5, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 147, line 5, Table 5, please delete "ob" and substitute --OB-- therefor.

At page 147, line 6, Table 5, please delete "ob" and substitute --OB-- therefor.

At page 147, line 1 of Table 6, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 147, line 6 of Table 6, please delete "ob" and substitute --OB-- therefor.

At page 147, line 7 of Table 6, please delete "ob" and substitute --OB-- therefor.

At page 147, line 7 of Table 6, please delete "ob" and substitute --OB-- therefor.

At page 147, line 1 (post Table 6), please delete "ob" and substitute --OB-- therefor.

At page 147, line 5 (post Table 6), please delete "Ob" and substitute --OB-- therefor.

At page 147, line 6 (post Table 6), please delete "Wild type" and substitute --Wild-type-- therefor.

At page 147, line 7 (post Table 6), please delete "ob" and substitute --OB-- therefor.

At page 147, line 7 (post Table 6), please delete "mass measured" and substitute --mass was measured-- therefor.

At page 147, line 1 of Table 7, please delete "ob" and substitute --OB-- therefor.

At page 147, line 4 of Table 7, please delete "ob" and substitute --OB-- therefor.

At page 148, line 1, please delete "ob" and substitute --OB-- therefor.

At page 148, line 2, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 148, line 4, please delete "Ob" and substitute --OB-- therefor.

At page 148, line 6, please delete "ob" and substitute --OB-- therefor.

At page 148, line 8, please delete "ob" and substitute --OB-- therefor.

At page 148, line 9, please delete "6th" and substitute --sixth-- therefor.

At page 148, line 13, please delete "Animals. Wild type" and substitute --Animals.  
¶ Wild-type-- therefor.

At page 148, line 13, please delete "Example. The" and substitute --Example.  
Mice were single-housed, and maintained under humane conditions. The-- therefor.

At page 148, line 17-18, please delete "Animal Handling:  
Feeding and weight measurement. Mice" and substitute --Feeding and weight  
measurement. ¶ Mice-- therefor.

At page 148, line 25, please delete "Housing. Mice were single-housed, and  
maintained under humane conditions.

*Administration of Protein or Vehicle.* Protein (as described below) or vehicle (phosphate buffered saline, pH 7.4) were administered by osmotic pump infusion. Alzet osmotic minipumps (Alza, Palo Alto, CA, model no. 1007D) were surgically placed in each mouse in a subcutaneous pocket in the subscapular area. The pumps were calibrated to administer 0.5 ml protein in solution per hour for a dosage of 0.5 mg protein/kg body weight/day.

*Controls.* Control animals were infused with phosphate buffered saline (pH 7.4) via an Alzet osmotic minipump.

*Protein.* Recombinant murine ob polypeptide was used for the present experiments, generally at a concentration of about 0.9 mg/ml phosphate buffered saline, pH 7.4. The amino acid sequence (and DNA sequence) used was the following:

Recombinant murine met ob (double stranded) DNA and amino acid sequence.

(Seq. ID Nos. \_\_\_\_ and \_\_\_\_):" and substitute

#### -- Cloning of Murine OB DNA

The cloning of the murine OB DNA for expression in *E. coli* was performed as follows. The DNA sequence as deduced from the published peptide sequence that appeared in (Zhang *et al.*, 1994, *supra*, i.e., Example 1, *supra*) was reverse translated using *E. coli* optimal codons. The terminal cloning sites were *Xba*I to *Bam*HI. A ribosomal binding enhancer and a strong ribosomal binding site were included in front of the coding region.

The duplex DNA sequence was synthesized using standard techniques. Correct clones were confirmed by demonstrating expression of the recombinant protein and presence of the correct *OB* DNA sequence in the resident plasmid. The amino acid sequence (and DNA sequence) is as follows:

*Recombinant murine met OB (double stranded) DNA and amino acid sequence.* (Seq. ID. NOS:94 and 95):-- therefor.

At page 150, please delete lines 18-26 in their entirety.

At page 150, line 31, please delete "*Bam*HI and" and substitute --*Bam*HI, and-- therefor.

At page 150, line 33, please delete "(Bachmann, et al., *Bacteriol. Rev.* 40: 116-167 (1976))" and substitute --[Bachmann *et al.*, *Bacteriol. Rev.*, 40:116-167 (1976)]-- therefor.

At page 150, line 34-35, please delete "(Sussman et al., *C.R. Acad. Sci.* 254: 1517-1579 (1962))" and substitute --[Sussman *et al.*, *C.R. Acad. Sci.*, 254:1517-1579 (1962)]-- therefor.

At page 150, line 36-38, please delete "*e.g.*, Sambrook, et al., *Molecular Cloning: A Laboratory Manual*, 2d Edition, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY." and substitute --*E.g.*, Sambrook *et al.*, 1989, *supra.*-- therefor.

At page 151, line 1, immediately prior to "*Fermentation Process*," please insert the following:

*--Administration of Protein or Vehicle*

Recombinant murine OB polypeptide was used for the present experiments, generally at a concentration of about 0.9 mg/ml phosphate buffered saline, pH 7.4. The amino acid sequence (and DNA sequence) used is set out immediately above. Protein or vehicle (phosphate buffered saline, pH 7.4) were administered by osmotic pump infusion. Alzet osmotic minipumps (Alza, Palo Alto, CA, model no. 1007D) were surgically placed in each mice in a subcutaneous pocket in the subscapular area. The pumps were calibrated to administer 0.5 ml protein in solution per hour for a dosage of 0.5 mg protein/kg body weight/day. Control animals were infused with phosphate buffered saline (pH 7.4) via an Alzet osmotic minipump.--

At page 151, line 4, please delete "raising to" and substitute --raising the temperature to-- therefor.

At page 151, line 8, please delete "500 mL" and substitute --500 ml-- therefor.

At page 151, line 11, please delete "OD<sub>600</sub>" and substitute --O.D.<sub>600</sub>-- therefor.

At page 151, line 16, please delete "OD reached 30, temperature" and substitute --O.D. reached 30, the temperature-- therefor.



At page 151, line 29, please delete "MgSO<sub>4</sub>·7H<sub>2</sub>O" and substitute --MgSO<sub>4</sub>·7H<sub>2</sub>O-- therefor.

At page 151, line 30, please delete "mL/L" and substitute --ml/L-- therefor.

At page 151, line 31, please delete "mL/L" and substitute --ml/L-- therefor.

At page 152, line 1, please delete "mL/L" and substitute --ml/L-- therefor.

At page 152, line 5, please delete "MgSO<sub>4</sub>·7H<sub>2</sub>O" and substitute --MgSO<sub>4</sub>·7H<sub>2</sub>O-- therefor.

At page 152, line 6, please delete "mL/L" and substitute --ml/L-- therefor.

At page 152, line 7, please delete "mL/L" and substitute --ml/L-- therefor.

At page 152, line 12, please delete "Biotin" and substitute --biotin-- therefor.

At page 152, line 12, please delete "Folic" and substitute --folic-- therefor.

At page 152, line 14, please delete "Fourteen g" and substitute --Fourteen grams of-- therefor.

At page 152, line 14, please delete "61 g" and substitute --61 grams of-- therefor.

At page 152, line 15, please delete "Fifty-four g" and substitute --Fifty-four grams of-- therefor.

At page 152, line 16, please delete "was dissolved" and substitute --were dissolved-- therefor.

At page 152, line 30, please delete "*Murine ob polypeptide*" and substitute --*Murine OB Polypeptide*-- therefor.

At page 153, line 12, please delete "tris" and substitute --Tris-- therefor.

At page 153, line 22, please delete "5 volumes" and substitute --five volumes-- therefor.

At page 153, line 23, please delete "tris" and substitute --Tris-- therefor.

At page 153, line 28, please delete "and pH" and substitute --and the pH-- therefor.

At page 154, line 3, please delete "done" and substitute --used-- therefor.

At page 154, line 3, please delete "NaOAC" and substitute --NaOAc-- therefor.

At page 154, line 6, please delete "made" and substitute --adjusted-- therefor.

At page 154, line 8, please delete "NaOAC" and substitute --NaOAc-- therefor.

At page 154, line 14, please delete "Table 8: Weight" and substitute --Table 8 ¶  
Weight-- therefor.

At page 154, line 16, please delete "ob" and substitute --OB-- therefor.

At page 154, line 26, please delete "ob" and substitute --OB-- therefor.

At page 154, line 28, please delete "of only was 2.6" and substitute --of only 2.6--  
therefor.

At page 154, line 29, please delete "wild type" and substitute --wild-type-- therefor.

At page 154, line 30, please delete "ob" and substitute --OB-- therefor.

At page 155, line 1, please delete "Ob" and substitute --OB-- therefor.

At page 155, line 5, please delete "ob" and substitute --OB-- therefor.

At page 155, line 7, please delete both occurrences of "ob" and substitute --OB--  
therefor.

At page 155, line 15, please delete "ob (*Double Stranded*)" and substitute --OB  
(*Double-Stranded*)-- therefor.

At page 155, line 16, please delete "(Seq. ID. Nos. \_\_\_\_ and \_\_\_\_)" and substitute --  
(SEQ ID Nos: 96 and 97)-- therefor.

At page 156, line 21, please delete "*Fermentation*. Fermentation" and substitute --  
*Fermentation*. ¶ Fermentation-- therefor.

At page 156, line 22, please delete "ob" and substitute --OB-- therefor.

At page 156, line 24, please delete "ob" and substitute --OB-- therefor.

At page 156, line 29, please delete "Ob" and substitute --OB-- therefor.

At page 156, line 43, please delete "Example 12" and substitute --Example 13--  
therefor.

At page 156, line 44, please delete at both instances "OD" and substitute at both  
instances --O.D.-- therefor.

At page 156, line 45, please delete at both instances "OD" and substitute at both instances --O.D.-- therefor.

At page 156, line 47, please delete "ob" and substitute --OB-- therefor.

At page 156, line 47, please delete "*polypeptide*. Recombinant" and substitute --*polypeptide*. ¶ Recombinant-- therefor.

At page 157, line 1, please delete "ob" and substitute --OB-- therefor.

At page 157, line 2, please delete "onto" and substitute --on to-- therefor.

At page 157, line 4, please delete "NaOAC" and substitute --NaOAc-- therefor.

At page 157, line 4, please delete "OM" and substitute --O-- therefor.

At page 157, line 5, please delete "four fold" and substitute --four-fold-- therefor.

At page 157, line 6, please delete "Twenty" and substitute --A twenty-- therefor.

At page 157, line 7, please delete "NaOAC" and substitute --NaOAc-- therefor.

At page 157, line 7, please delete "0.2 M to 0M" and substitute --0 to 0.2M-- therefor.

At page 157, line 13, please delete "Ob" and substitute --OB-- therefor.

At page 157, line 14, please delete "Ob" and substitute --OB-- therefor.

At page 157, line 29, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 158, line 1, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 158, line 3, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 159, line 1, please delete "Table 11. Body Weight, Composition, Insulin Levels, and Glucose Levels of Treat Mice" and substitute --Table 11 ¶ Body Weight, Composition, Insulin Levels, and Glucose Levels of Treated Mice-- therefor.

At page 160, line 2, please delete "The date" and substitute --The data-- therefor.

At page 160, line 12, please delete "ob/ob" and substitute --ob/ob-- therefor.

At page 160, line 12, please delete "a day i.p. with" and substitute --a day, i.p., with-- therefor.

At page 160, line 13, please delete "(PBS), and body" and substitute --(PBS); body-- therefor.

At page 160, line 15, please delete "day 4" and substitute --day four-- therefor.

At page 160, line 17, please delete "indistinguishable" and substitute --indistinguishable-- therefor.

At page 160, line 19, please delete "shown on Table" and substitute --shown in Table-- therefor.

At page 161, line 1, please delete "Table 12. Body Composition" and substitute --Table 12 ¶ Body Composition-- therefor.

At page 162, line 2, please delete "wild type" and substitute --wild-type-- therefor.

At page 162, line 3, please delete "associate with" and substitute --associated with-- therefor.

At page 162, line 15-17, please delete "Bahary, N.; G. Zorich; J.D. Pachter; R. L. Leibel; and J.M. Friedman. 1991. Molecular genetic linkage maps of mouse chromosomes 4 and 6. Genomics 11:33-47." and substitute --Bahary *et al.*, *Genomics*, 11:33-47 (1991).-- therefor.

At page 162, line 19-21, please delete "Bahary, N.; D. McGraw; R.L. Leibel; and J.M. Friedman. 1991. Chromosomal microdissection of midmouse chromosome 4: Mapping of microclones relative to the mouse *db* gene." and substitute --Bahary *et al.*, in Chromosomal microdissection of midmouse chromosome 4: Mapping of microclones relative to the mouse *db* gene (1991).-- therefor.

At page 162, line 23-25, please delete "Bahary, N.; J. Pachter; R. Felman; R.L. Leibel; K.A. Albright; S. Cram; and J.M. Friedman. 1991. Molecular mapping of mouse chromosomes 4 and 6: Use of a flow-sorted Robertsonian chromosome." and substitute --Bahary *et al.*, Molecular mapping of mouse chromosomes 4 and 6: Use of a flow-sorted Robertsonian chromosome (1991).-- therefor.

At page 162, line 27-29, please delete "Blank, R.; J. Eppig; F.T. Fiedorek; W.N. Frankel; J. M. Friedman; K. Huppi; I. Jackson; and B. Mock. 1991. Mouse chromosome 4. Mammalian Genome 1(suppl): s51-s78." and substitute --Blank *et al.*, *Mammalian Genome*, 1:s51-s78 (1991).-- therefor.

At page 163, line 1-4, please delete "Bogardus, C.; Ravussin, E.; Abbot, W.; Zaskzku, J.K.; Young, A.; Knowler, W.C.; Friedman, J.M.; R. L. Leibel; N. Bahary; D. A. Siegel; and G. Truett, G. 1991. Genetic analysis of complex disorders: Molecular mapping of obesity genes in mice and humans. Annals of the New York Academy of Sciences 630:100-115." and substitute --Bogardus *et al.*, *Annals of the New York Academy*

of Sciences, 630:100-115 (1991)-- therefor.

At page 163, line 6-7, please delete "Friedman, J.M.; R. L. Leibel; and N. Bahary. 1991. Molecular mapping of obesity genes. Mammalian Genome 1:130-144. " and substitute --Friedman *et al.*, *Mammalian Genome*, 1:130-144 (1991) -- therefor.

At page 163, line 9-10, please delete "Friedman, J.M.; R.L. Leibel; N. Bahary; and G. Zorich. 1991. Molecular mapping of the mouse *ob* mutation. Genomics 11:1054-1062."

At page 163, line 12, please delete "Harris, M.I. (1991). *Diabetes Care* 14 (suppl. 3), 639-648."

At page 163, line 14-15, please delete "Harris, M.I.; Hadden, W.C.; Knowler, W.C.; and Bennett, P.H.(1987). *Diabetes* 36, 523-534."

At page 163, line 17, please delete "Harris, R.B.S. (1990). *FASEB J.* 4, 3310-3318." and substitute --Harris, *FASEB J.*, 4:3310-3318 (1990).-- therefor.

At page 163, line 19, please delete "Jacobowitz, R., and Moll, P.O. (1986). *N. Engl. J. Med.* 315, 96-100" and substitute --Jacobowitz *et al.*, *N. Engl. J. Med.*, 315:96-100 (1986)-- therefor.

At page 163, line 21-22, please delete "Kessey, R.E. (1980). In *Obesity*, A. Stunkard, eds. (Philadelphia: W.B. Saunders Co.), pp. 144-166." and substitute --Kessey, in *Obesity*, pp. 144-166, Stunkard ed., Philadelphia, W.B. Saunders Co. (1980).-- therefor.

At page 163, line 24, please delete "Kessey, R.E., and Pawley, T.L. (1986). *Annu. Rev. Psychol.* 37, 109-133.22" and substitute --Kessey *et al.*, *Ann. Rev. Psychol.*, 37:109-133.22 (1986).-- therefor.

At page 163, line 26-29, please delete "Leibel, R.L., N. Bahary and J.M. Friedman. 1990. Genetic variation and nutrition in obesity: Approaches to the molecular genetics of obesity. In Genetic variation and Nutrition (Simopoulos, A.P. and Childs, B., eds.), S. Karger, Basel, pp. 90-101." and substitute --Leibel *et al.*, "Genetic variation and nutrition in obesity: Approaches to the molecular genetics of obesity", in *Genetic Variation and Nutrition*, pp. 90-101.1, Simopoulos and Childs eds., S. Karger, Basel (1990).-- therefor.

At page 164, line 1-3, please delete "Siegel, D.; N.G. Irving; J.M. Friedman; and B. J. Wainwright. 1991. Localization of the cystic fibrosis transmembrane conductance regulator to mouse chromosome 6. Cytogenetics Cell Genetics. Submitted." and substitute --Siegel *et al.*, Localization of the cystic fibrosis transmembrane conductance regulator to mouse chromosome 6. *Cytogenetics Cell Genetics* (1991). Submitted.-- therefor.

At page 164, line 5-7, please delete "Truett, G.E.; N. Bahary; J. M. Friedman; and